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ANNUAL REPORT
OF THE
Department of
Public Health
OF THE
City of Newark, New Jersey



For the Year Ending December 31, 1914



THE NEWARK CITY TUBERCULOSIS SANATORIUM VERONA, NEW JERSEY

WITH THE COMPLIMENTS OF THE

*BOARD OF HEALTH
OF NEWARK, N. J.*

*THIS DEPARTMENT WOULD BE GLAD TO RECEIVE YOUR
PUBLICATIONS IN RETURN*

*CHARLES V. CRASTER, M.D., D.P.H.
HEALTH OFFICER*

ANNUAL REPORT

OF THE

Department of Health

CITY OF NEWARK, NEW JERSEY



FOR THE YEAR ENDING DECEMBER 31, 1914

THE ESSEX PRESS, PRINTERS,
NEWARK, N. J.



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9-17 Essex Co. Tub. League 3/23

MEMBERS OF THE BOARD OF HEALTH
OF NEWARK, NEW JERSEY
FOR THE YEAR 1914

DR. H. C. H. HEROLD.....	1012 Broad Street
DR. J. T. WRIGHTSON.....	25 Walnut Street
MR. J. H. McLEAN.....	259 South Tenth Street
MR. CHAS. W. BAKER.....	234 Roseville Avenue
DR. GEORGE L. WARREN.....	77 Houston Street
MR. TIMOTHY F. FOYLE.....	333 Warren Street
DR. FRANK B. MEEKER.....	63 First Street
MR. OTTO B. SCHALK.....	455 Fourth Avenue
MR. CHAS. L. WHITFIELD.....	384 Summer Avenue
*DR. R. A. DIEFFENBACH.....	570 Mt. Prospect Avenue
†DR. A. S. HARDEN.....	540 Warren Street

HEALTH OFFICER.

MR. DAVID D. CHANDLER.....	376 Roseville Avenue
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* Resigned August 1st, 1914.

† Appointed September 1st, 1914.

STANDING COMMITTEES OF THE BOARD OF HEALTH

FOR THE YEAR 1914

SANITATION.

DR. MEEKER

MR. BAKER

MR. FOYLE

MR. SCHALK

DR. DIEFFENBACH

FINANCE.

MR. MCLEAN

MR. WHITFIELD

MR. SCHALK

LAWS AND ORDINANCES.

MR. WHITFIELD

MR. SCHALK

MR. FOYLE

RULES.

DR. DIEFFENBACH

DR. WARREN

DR. WRIGHTSON

APPOINTMENTS.

MR. FOYLE

MR. WHITFIELD

MR. BAKER

SUPPLIES.

MR. SCHALK

MR. MCLEAN

MR. BAKER

CITY HOSPITAL.

DR. WRIGHTSON

DR. WARREN

MR. FOYLE

DR. MEEKER

MR. MCLEAN

Dr. Albert S. Harden succeeded Dr. R. A. Dieffenbach on all committees after September 1st, 1914.

BOARD OF HEALTH.

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TRAINING SCHOOL.

DR. MEEKER

DR. WRIGHTSON

DR. HEROLD

DR. WARREN

DR. DIEFFENBACH

TUBERCULOSIS SANATORIUM.

DR. WARREN

MR. FOYLE

DR. WRIGHTSON

MR. BAKER

DR. DIEFFENBACH

FOOD AND DRUGS

MR. SCHALK

MR. MCLEAN

DR. WARREN

MR. BAKER

SEX HYGIENE AND SOCIAL ETHICS.

DR. HEROLD

MR. SCHALK

MR. BAKER

DR. DIEFFENBACH

PURCHASING

MR. WHITFIELD

MR. MCLEAN

DR. WARREN

MR. SCHALK

LEGISLATIVE.

DR. WRIGHTSON

MR. BAKER

MR. FOYLE

MR. SCHALK

DR. MEEKER

MR. WHITFIELD

CHILD HYGIENE

MR. WHITFIELD

DR. WARREN

MR. FOYLE

MR. MCLEAN

DR. DIEFFENBACH

MEETINGS

Third Tuesdays of each month at 8:30 P. M. The meeting on the First Tuesday shall be held for the transaction of all business pertaining to the Sanitary Department. The meeting of the Third Tuesday shall be held for the transaction of all business pertaining to the Newark City Hospital and Newark City Sanatorium.

The regular meetings of the Sanitary Committee will be held on the Thursday preceding the first Tuesday of each month at 8:30 P. M.

Should the above meeting fall on a legal holiday, then said meeting shall be held on the day previous.

EMPLOYEES OF THE BOARD OF HEALTH

OFFICE DIVISION.

JOHN J. GREENE.	<i>Clerk, Bureau Contagious Diseases</i> 308 Riverside Avenue.
W J BUEHLER.....	<i>Bookkeeper</i> 542 Sanford Avenue
WILLIAM H. YOUNG.....	<i>Clerk, Sanitary Division</i> 673 Summer Avenue
ELBERT S. BALL	<i>Clerk, Sanitary Division</i> 226 South Tenth Street
ROBERT F. MORGAN, 3RD.. . . .	<i>Stenographer and Clerk</i> 159 Milford Avenue
MISS JENNIE McNALLY.....	<i>Telephone Operator</i> 135 Renner Avenue
MISS CORA B. NATHAN...	<i>Clerk</i> 375 Walnut Street.
EDWARD E. WHEEL, M. D. <i>Superintendent Bureau Contagious Diseases</i>	271 High Street
HERBERT B. BALDWIN.....	<i>Chemist</i> 927 Bedford Street
WILLIAM WIENER	<i>Metallogist</i> 62½ Nelson Place.

BACTERIOLOGICAL DIVISION.

DR R. N. CONNOLLY .	<i>Bacteriologist</i>
City Hospital Building.	
DR J. M. S. RILEY .	<i>Assistant Bacteriologist</i>
14 Hillside Avenue	
DR H. A. TUCKER .	<i>Second Assistant Bacteriologist</i>
87 Hillside Avenue	
DR H. S. MARYLAND.....	<i>Pathologist</i>
1138 Broad Street.	
JOHN OLIVER.....	<i>Porter</i>
City Hospital	
JOHN A. DUNN	<i>Culture Collector</i>
7 South Street	
WILLIAM J. FOYLE	<i>Culture Collector</i>
333 Warren Street	
DR JULIUS LEVY.....	<i>Director Child Hygiene</i>
191 Littleton Avenue.	

SANATORIUM FOR TUBERCULOSIS

DR. JOHN L. MEERER.	<i>Medical Director</i>
EDITH RILEY.	<i>Superintendent and Head Nurse</i>
GENEVIEVE KETCHUM	<i>Nurse</i>
MARY E. ROSS	<i>Nurse</i>
OSCAR A. HEROLD	<i>Cook</i>
MARY DEVINE.	<i>Cook</i>
BERNARD LAWRENCE	<i>Porter</i>
KATHERINE BRADLEY	<i>Mid</i>
KATE SULLIVAN	<i>Mid</i>
MARY SHIMSKY	<i>Mid</i>
FORTUNA CATHERINO	<i>Waitress</i>
MARY WILSON	<i>Waitress</i>
LENA CORELIO	<i>Waitress</i>
KATE FOX.	<i>Laundress</i>
JENNIE LEVAN	<i>Laundress</i>
EDITH J. MEERER	<i>Laundress</i>
GEORGE RICHIE	<i>Orderly</i>
ALBERT J. MEERER	<i>Stableman</i>
ROSE FILE	<i>Kitchen Helper</i>
LOUIS PITOIA	<i>Orderly</i>
TIMOTHY WALSH	<i>Helper</i>

BOARD OF HEALTH.

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CITY DISPENSARY.

WILLIAM A. SMITH.....	<i>Apothecary</i>
40 Nelson Place	
HENRY A. OLTMAN	<i>Assistant Apothecary</i>
348 Thirteenth Avenue.	
ARTHUR F. WARREN.....	<i>Assistant Apothecary</i>
16 Lyons Avenue.	
LEO J. McMANUS.. . . .	<i>Dentist</i>
240 Mulberry Street	
ANNA BRIDGETT.....	<i>Nurse</i>
23 Nelson Place	
MORRIS SEIDEL	<i>Detailed</i>
413 South Eighth Street	
PAYSACH G. SPAN	<i>Janitor</i>
357 Washington Street.	

DISTRICT PHYSICIANS

DR. CHARLES F. HILL	180 Polk Street
*DR. SAMUEL HIRSHBERG.	268 Fifteenth Avenue
*DR. W. F. L. RODEMANN	64 Prospect Street
DR. MEYER JEDEL....	125 Fourth Street
DR. MARY E. BROADNAX	79 Clinton Avenue
DR. WILLIAM C. FISCHER	862 South Orange Avenue

SANITARY DIVISION—MEAT INSPECTORS.

WERNER RUNGE.....	130 Union Street
DANIEL KUHN.	882 South 17th Street

PLUMBING INSPECTORS

JOHN B. SULLIVAN, <i>Chief</i>	44 Stuyvesant Avenue
JOHN L. WHELAN.. . . .	120 Lincoln Avenue
EDWARD P. COULSTON	375 Walnut Street
CHARLES A. HALLGRING.....	376 Walnut Street
ANDREW J. MCGOOKIN.	510 South 17th Street
JACOB KULL.....	282 14th Avenue

FOOD AND DRUG INSPECTORS

SAMUEL G. SCHARWELL, <i>Chief</i>	69 South 7th Street
*WILLIAM S. WEBB	96 Alpine Street
*LOUIS E. BOUTILLIER	282 South 11th Street

* Detailed as Food and Drug Inspectors

INSPECTOR NURSES

MRS. LOUISE RICHARDS WHEATON	323 Sussex Avenue
MISS LAVINIA M. WARD	757 Mt. Prospect Avenue

DETAILED INSPECTORS TO HEALTH OFFICER

ANDREW J. BRADY	49 Seymour Avenue
CHARLES F. CONRAD	232 South Sixth Street
BERNARD J. CAHILL	160 South Tenth Street

DETAILED IN HEALTH OFFICE.

HOWARD HUFERT	190 South Eighth Street
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SANITARY INSPECTORS

ALBERT BREIDENBACH	25 Union Street
PATRICK J. BROGAN	128 Milford Avenue
JOSEPH A. MAGUIRE	95 Madison Street
ALBERT BREIDENBACH	111 Bergen Street
PATRICK J. BROGAN	116 Bergen Street
JOSEPH A. MAGUIRE	142 $\frac{1}{2}$ Sherman Avenue
ALBERT BREIDENBACH	193 Parker Street
PATRICK J. BROGAN	29 Vermont Avenue
JOSEPH A. MAGUIRE	34 Fifth Street
ALBERT BREIDENBACH	67 First Street
PATRICK J. BROGAN	88 Be 21 Street
JOSEPH A. MAGUIRE	105 Fourth Street
ALBERT BREIDENBACH	136 Norfolk Street
PATRICK J. BROGAN	746 South Nineteenth Street
JOSEPH A. MAGUIRE	431 South Eleventh Street
ALBERT BREIDENBACH	498 Twelfth Avenue
PATRICK J. BROGAN	122 Orchard Street

DISINFECTING CORPS

SAMUEL KNOYT, <i>Chief</i>	279 Plane Street
HIRAM R. STEWART	59 West End Avenue
*LEONARD GILLEN	24 Orchard Street
THOMAS F. NEWTON	17 Rowland Avenue
ROBERT J. CARROLL	189 Highland Avenue
JAMES A. GILMAN	17 Stanton Street
GEO. W. GUNN	169 Ridgewood Avenue
IRWIN C. DAKIN	45 Eleventh Avenue
JAMES J. WATERS	325 Walnut Street
FRED W. NICHOLS	118 Ninth Avenue
ADOLPH HOERNIG, <i>Janitor</i>	62 10th Avenue
VAN S. HURLBURT, <i>Porter</i>	46 Nelson Place

MEDICAL INSPECTORS OF PAROCHIAL SCHOOLS

DR. H. C. POVEY	39 Mott Street
DR. H. G. MCBRIDE	248 Mulberry Street
DR. M. J. COFFEY	216 Bank Street
DR. PATRICK J. CLARK	393 South Orange Avenue
DR. D. R. CAMPBELL	22 Central Avenue

* Died August 16, 1914

DIVISION OF CHILD HYGIENE.

DR. HYMAN SHLAPPIN	<i>Clinic Physician</i>
18 Hillside Place	
MRS. EVA MARSHALL WAX	<i>Teacher</i>
636 High Street	
MRS. CHARLOTTE WEINTHAL	<i>Teacher</i>
1 Richmond Street	
MISS CHARLOTTE ISABEL CLAFLIN	<i>Teacher</i>
212 Clifton Avenue	
MISS MARY F. MCGUINNESS	<i>Stenographer</i>
273 New Street	

DISTRICT LINES FROM AUGUST 1, 1914

- 1st DISTRICT—DR. CHARLES F. HILL—Adams Street, Avenue "F," Market Street, Broad Street, Fulton Street and Passaic River.
- 2nd DISTRICT—DR. MARY E. BROADNAX—Tichenor Street, Broad Street, Clinton Avenue, Avenue "F" and City Line.
- 3rd DISTRICT—DR. W. F. L. RODEMANN—Adams Street, Tichenor Street, Broad Street and Market Street.
- 4th DISTRICT—DR. SAMUEL HIRSCHBERG—Broad Street, Clinton Avenue, High Street, South Orange Avenue, Bergen Street, Warren Street, Sussex Avenue and Central Avenue.
- 5th DISTRICT—DR. WILLIAM C. FISCHER—Clinton Avenue, High Street, South Orange Avenue, Bergen Street, Warren Street and City Line.
- 6th DISTRICT—DR. MEYER JEDEL—Fulton Street, Central Avenue, Sussex Avenue, Warren Street and City Line.

ANTI-TOXIN AND CULTURE STATIONS

STATION	Street and Number	Telephone No.
Oscar Scholz	31 Hamburg Place	1443 Market
Samuel Snger	77 Ferry Street	1493 "
O. Von Gehren	300 Ferry Street	1367 "
J. Levenson ..	28 Bowery Street	10104 "
Chas. Holzhauer	787 Broad Street	1312 "
E. F. Fielding..	125 Broad Street	914 Mul
Geo. Linnett & Bros.	77 Lincoln Park	3034 "
A. E. Sayre.	184 Broad Street	3754 Market
Chas. P. Moll	106 Central Avenue	1319 "
L. L. Staehle.	109 South Orange Avenue	1539 "
J. P. Smith	315 South Orange Avenue.	1514 Mul
P. Corrigan	25 Wallace Place	3205 Market
C. W. Menk	106 Market Street	291 Mul
St. Michael's Hospital	Central Avenue and High Street	7610 Market
David Strauss	Springfield Avenue and High Street	4633 "
E. Broch	Central Avenue and First Street.	3301-J "
F. L. Fendt...	76 Belmont Avenue	2494 Waverly
Em. J. Reiche	362 Springfield Avenue	2023 "
H. Haguy	131 Clinton Avenue	2468 "
L. Haguy	Central Avenue and Fifth Street	1651 B B
W. R. Scudder ..	95 Belleville Avenue	1142 "

ANTI-TOXIN AND CULTURE STATIONS *Continued*

STATION	Street and Number	Telephone No
Geo. Brown, Jr.	280 Bellevue Avenue	761
A. R. Bianchi	Sheffield and Seventh Avenues	1426
J. B. Foster	Roseville Avenue and Seventh	151
Geo. D. Foster	190 Washington Avenue	1691
J. G. M.	187 Blenheim Avenue	269 "
J. J. Tempel	210 Clinton Avenue	818 Waverly
Firemen's Pharmacy	Bradford and Market Streets	5116 Market
St. Barnabas Hospital	Highland, Montgomery Street	6616 "
A. Marquier	1041 South Orange Avenue	2878 Mul
J. K. Hall	191 Avon Avenue	1103 Waverly
A. H.	861 Clinton Avenue	2871 "
L. V. Green	Pacific and W. 11th Streets	3908 Market
A. Rousch	Springfield Avenue	2144 Waverly
City Dispensary		8550 Market
First Precinct Police	Court and Washington Streets	5100 Market
Second Precinct Police	Summer Avenue and Seventh Avenue	5400 "
Third Precinct Police	Van Buren Street	5400
Fourth Precinct Police	Seventeenth Avenue and Eleventh Street	5400 "
Fifth Precinct Police	Orange and Sixth Street	5400 "
Sixth Precinct Police	Hunterton and Bigelow Streets	5400 "
Seventh Precinct Police	908 South Orange	5400
Eighth Precinct Police	259 Washington Avenue	5400

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BOARD OF HEALTH.

CULTURE COLLECTORS

JOHN F. DUNN
65 South Seventh Street

WILLIAM J. FOYLE
333 Warren Street

CLINICS AT CITY DISPENSARY

MEDICAL—9 A. M. Daily except Sunday.

DISEASES OF CHILDREN Monday, Wednesday, Friday, 10 o'clock

SURGICAL—Daily at 9 o'clock

GENITO URINARY Monday and Thursday, 10 o'clock

DISEASES OF WOMEN Tuesday and Friday, 3 o'clock

DISEASES OF SKIN—Tuesday and Friday, 9 30 o'clock

SYPHILIS—Wednesday, 3 o'clock

EYE, EAR, THROAT AND NOSE—Monday, 3 o'clock

NERVOUS DISEASES Friday, 2 o'clock.

ORTHOPEDIC—Monday, 9 o'clock

TUBERCULOSIS TREATMENT—Wednesday, 3 o'clock

TUBERCULOSIS EXAMINATION Verona, Monday, 3 o'clock
Glen Gardner, Wednesday, 10 o'clock Soho, Thursday, 2 o'clock

DENTIST Monday, Wednesday and Friday, 1 o'clock

ANNUAL REPORT
OF THE
HEALTH OFFICER
FOR THE YEAR 1914

ANNUAL REPORT

OF THE

HEALTH OFFICER

To the Honorable, the Board of Health of the City of Newark, N. J.

GENTLEMEN: I have the honor to herewith present to you my report of the workings of the various divisions of the Department of Public Health, together with the reports of the Bacteriologist, Pathologist, Chemist, Superintendent of Bureau of Contagious Diseases, Superintendent of Newark City Sanatorium for Tuberculosis, and Director of Child Hygiene Division for the year ending December 31, 1914.

SANITARY DIVISION.

The city is divided into 17 districts, patrolled by 17 inspectors, appointed by the Board of Health. Each inspector is held responsible for the sanitary condition of his district.

Inspections from Complaint Cards.	3,776
Inspections from Complaint Cards verified	3,158
Inspections from Complaint Cards, no cause.	618
Number of original inspections made	30,238
Total number of inspections made.	34,014
Number of written notices served	3,036
Abatements from written notices	2,989
Number of verbal notices served.	5,091

Abatements from verbal notices	448
Total number of abatements	457
Number of hours in court	280
Number of cisterns and wells inspected	12
Samples of well and cistern water examined	12
Number of wells and cisterns closed	10
Sewer connections ordered made.	96
Sewer drains inspected	1003
Sewer drains inspected to curb line	24
Cesspools inspected	287
Alleyways inspected	100
Alleyways inspected and found unsanitary	74
Streets needing cleaning	64
Cellars inspected	968
Cellars inspected and found unsanitary	102
Atmosphere of cellars inspected	12
Ashes accumulation	144
Garbage accumulation	1275
Surface drainage	22
Vacant lots in an unsanitary condition	61
Stagnant water in vacant lots	57
Defective water pipes.	10
Houses with unsanitary living rooms	96
Houses unfit for habitation.	19
Slaughter house inspections.	1812
Slaughter houses in unsanitary condition	27
Houses unprovided with privy vault or water closet	28
Houses with no water supply	56
Houses with roofs leaking	22
Storm gutters and leaders defective.	64
Hydrants in yards defective.	18
Privy vaults in unsanitary condition.	87
Privy vaults full.	97
Cesspools full.	50
Privy houses dilapidated.	28
Privy vaults and houses over same ordered reconstructed.	56
Privy vaults ordered cleaned and filled	56
Yards inspected	9365
Yards in an unsanitary condition.	2195
Plumbing defective	48
Water closets defective.	49
Pits under water closets defective and not watertight.	116

Stables inspected, including cow stables	126
Manure accumulation	2
Number of animal permits issued	192
Number of animals licensed....	69
Total number of nuisances found	1184
Total number of reinspection	12,909
Number of inspections for milk licenses.	4386
Number of inspections for chicken permits	3545
Number of inspections for ice licenses ..	255
Number of inspections of public and parochial schools	1356
Contagious Disease Postals delivered to Doctors	48
Contagious Disease reports delivered to Sunday Schools	1046
Served notices for other inspectors	1192
Number of expectoration signs posted throughout the city.	9
Number of signs containing instruction on the subject of venereal diseases, posted throughout the city.....	900
Number of stores visited in reference to food exposure..	1,043
Number of written notices served in connection with same	143
Number of verbal notices served in connection with same.	315
Number of tenements found overcrowded	33
Suit cases instituted for violation of Sanitary Code	138
Penalties imposed for Sanitary Code violations	4
Cases discontinued on payment of costs and abatement of the nuisance	19
Cases discontinued because of change in ownership	16
Cases discontinued prior to summons being served, the work having been done.	89
Cases instituted by the Food and Drug Division	29
Penalties imposed by Court for Food and Drug violations	0
Number of cases in which penalties were imposed for vio- lations of the spitting ordinance	32
Number of stables disinfected for contagious diseases among animals, principally glanders ..	97
Number of blacksmith shops disinfected for contagious diseases among animals, principally glanders	81

The Sanitary Inspectors make monthly reports of the collection by the Scavenger Contractor of ashes and garbage in their various districts, a copy of which is submitted to the Board of Street and Water Commissioners.

A copy of the Contagious Disease Report is mailed daily to public schools, playgrounds, parochial schools, private schools, business colleges, dry goods stores, factories and public bath houses, and a weekly report of same is delivered every Saturday morning by the Sanitary Inspectors to all Sunday Schools in Newark.

PLUMBING DEPARTMENT SUMMARY FOR 1914 PLUMBING PLANS

Number of Plumbing Plans approved.....	1,890
Number of Plumbing Plans rejected.	133

TESTS AND INSPECTIONS.

Number of water tests made	1,605
Number of smoke tests made...	898
Number of plumbing inspections made.....	3,343
Number of final plumbing inspections	589

PERMITS GRANTED.

Number of sewer permits granted	707
Number of relay sewer permits granted	142
Privy vaults	2
Cesspools	3
Manure pits	1

VIOLATIONS

Number of violations served...	23
Number of violations rectified	13
Number of hours spent in Court.....	83
Number of hours spent on Examining Board for licensing master plumbers	80

MEAT AND LIVE STOCK DIVISION.

This Division consists of two inspectors, one a Veterinarian, whose duty it is to look after slaughter houses and wholesale meat markets, and the other an experienced butcher, whose duty it is to visit all the public and private meat and vegetable markets. The following is a summary of the work performed by them during the year 1914:

VETERINARIAN MEAT INSPECTION

Cattle inspected	13,025
Calves inspected	13,545
Sheep inspected	23,752
Hogs inspected	14,577

CONDEMNED.

Carcasses of beef.....	22
Calves	25

MEAT INSPECTORS REPORT.

Centre Market visited daily.	
Number of carcasses of beef inspected.....	25,489
Number of carcasses of lamb and sheep inspected.....	96,093
Number of calves inspected.....	12,052
Number of hogs inspected	12,674

CONDEMNED

4 lambs.	
1 barrel of poultry.	
138 lbs beef	
4 rabbits.	
3 loins of beef.	
6 plates of beef.	
8 br.skets of beef.	
3 bushels of tomatoes.	
10 shins of beef	
Numerous complaints were investigated and adjusted.	

DRUG AND FOOD INSPECTOR'S REPORT

The Food and Drug Department submit the following report of their work for the year 1914:

Owing to insufficient funds, this Department has been unable to score any dairies excepting those in the immediate vicinity of Newark, and we have been able to score only half of the creameries which distribute the milk. This has resulted in two-thirds of our licenses being held up, particularly the railroad, pasteurized milk.

In spite of this handicap, we are positive that the quality of our milk supply has greatly improved. This is proven by lower bacteria counts, more fat and total solids, chemically, and cleaner sediment tests. We believe this due entirely to the requirements of our new ordinance. We have taken particular action in regard to having milk properly bottled by means of our new score card, and as a result the city and suburban bottled milk is now bottled in plants and in such a manner as was unthought of a year ago.

During December our time was almost entirely occupied in co-operating with the State and Government authorities in inspecting and quarantining dairies for foot and mouth disease, an epidemic which is now spreading over the entire country.

Number of complaints investigated..	183
Number of complaints verified	100
Number of complaints with no cause	83
Dairies inspected and scored	28

Dairies reinspected	34
Cheese factory inspected.....	1
Bakeries inspected	8
Milk bottling plant inspections	197
Creameries inspected	47
Soda factories inspected	18
Pickle factory inspections.....	2
Special inspection of stores.....	7
Special inspection for soda fountains.. ..	92
Sealed samples of milk taken to chemist	867
Preliminary samples of milk taken to chemist.....	540
Sediment samples of milk taken to chemist.....	273
Butter samples to chemist	14
Cream samples to chemist.....	6
Orangeade samples to chemist.	1
Birch beer to chemist.....	1
Stores inspected with State Inspector.....	11
Sealed milk samples taken with State Inspector.	111
Samples of milk taken to bacteriologist.....	879
Dairies inspected for hoof and mouth disease....	40
Dairies quarantined for hoof and mouth disease.....	7
Cows killed in quarantined dairies with hoof and mouth disease ...	135
Milk condemned and dumped in dairies with hoof and mouth disease ...	17,345 qts.
Removal permits for cattle through quarantine district issued as State Representative.	19
Inspectors detailed on quarantined work out of town ..	21 days 4 nights
Oyster samples sent to Trenton Laboratory	1 doz.

During the past year a system was accepted of taking bacteria samples from the better supplies. The result was that the average for 325 samples taken from 40 sources was 785,300. This is hardly a fair average, however, as six of the samples totaled 140,000,000 or an average of 23,600,000. Eliminating these six counts, which were errors of some kind, as well as six of the poorer supplies, and the result is an average of 155,622 for 40 sources.

FOOD AND DRUG DEPARTMENT
IN YEAR 1914.

35	cans	peas
135	cans	herring
125	cans	condensed milk.
78	cans	evaporated milk.
25	cans	tomatoes.
36	cases	of canned tomatoes.
25	jars	mustard.
5	bottles	pepper relish.
10	bottles	horse radish.
6,678	cans	tomato sauce.
151	candy	covered apples.
150	lbs.	spaghetti
7	chickens	
½	bbl	bologna.
25		frankfurters
19	rolls	
5	quarts	lemonade
1	crate	oranges
1	sack	onions
4	sacks	potatoes.
7	bbls	potatoes.
1	crate	tomatoes
6½	bbls	apples.
2	crates	cantaloupes.
37	pints	raspberries.
196	baskets	cherries.
100	lbs.	cherries.
22	quarts	strawberries
875	lbs	blue grapes.
28	cracked	eggs.
690	doz.	eggs.

REPORT OF DETAILED INSPECTOR TO HEALTH OFFICER

The following visits were made to the Water Sheds, Cedar Grove and Belleville Reservoirs to obtain samples of our city water supply for bacteriological and chemical examinations. Also took samples of water in Board of Health Office and other points in the city, as well as from private wells, cisterns, springs and streams in and out of the city for examination

Number of visits to the Water Sheds,	26
Number of visits made to Cedar Grove Reservoir... .	27
Number of visits made to Belleville Reservoir,	28

Samples of city water supply were taken at the following places and delivered to bacteriologist:

Oak Ridge Stream	19
Clinton Stream	19
Kanouse Brook	19
Echo Lake Stream	19
Macopin Intake	20
Cedar Grove Reservoir.....	39
Belleville Reservoir	44
Board of Health Office	25
763 Broad Street	5
N. J. R. R. Avenue, corner of Murray Street.....	5
49 Seymour Avenue	2
84 Bank Street	1
St. Mary's Orphanage—South Orange Avenue.....	4
Weequahic Park	2
9-11 Clinton Street.....	2
212 South Orange Avenue.....	1
226 Clifton Avenue	2
<hr/> Total	<hr/> 329

Samples of water taken from private wells in this city ...	18
Samples of water taken from springs in the city.. ..	.
Samples of ice taken .. ..	.
Samples of water taken from the Morris Canal .. ..	.

Total 18

Samples taken at St. Mary's Orphanage during outbreak of typhoid fever:

Contents of abandoned cesspool .. ..	.
Surface drain	2
Urine	3
Swab samples .. ..	.
Lettuce	1
Milk	1

Total 18

Samples taken out of town:

Caldwell, N. J., well water	1
Caldwell, N. J., cistern water	1
Morristown, N. J., well water	1
Morristown, N. J., spring water	1
Roseland, N. J., well water .. ..	.
Verona, N. J., well water	1
Denville, N. J., well water	2
Denville, N. J., milk	1
Newfoundland, N. J., well water	1

Total 389

Samples of water taken at the following points of city water supply and delivered to the chemist:

Oak Ridge Stream	11
Clinton Stream	11
Kanouse Brook	11
Echo Lake Stream	11
Macopin Intake	11
Cedar Grove Reservoir	22
Belleville Reservoir	11
226 Clifton Avenue	1

Total 89

Samples of private wells in this city	2
Samples of sun-ray water	2

Samples taken out of town:

Morristown, N. J., well	1
Morristown, N. J., spring	2
Roseland, N. J., well	1
Denville, N. J., well	1
Total	5

On trips to the Water Sheds the toilets on the Susquehanna Railroad cars were open on February 6th and 10th, June 8th and 13th, July 17th and 21st and October 28th.

Number of inspections made	158
Number of inspections made with other inspectors	46
Poultry slaughter houses inspected	118
Dance halls inspected	104
Lounging places inspected	33
Motion picture theatres inspected	20
Open air motion picture parks inspected	12
Cemeteries inspected	2
Baby farms inspected	5
Orphan asylums visited	6
Parochial schools visited	25
Water shed inspections	3

Total	579
Reinspections made	127
Number of calls made	481
Days in the office	38
Days out of the city	3
Days at St. Mary's Orphanage	11
Number of days at water sheds	42
Hours in court	3

Applications made for public poultry slaughter houses	16
Permits granted for public poultry slaughter houses	5
Permits rejected for public poultry slaughter houses	8
Applications laid over for public poultry slaughter houses	3

Applications made for private poultry slaughter houses .	2
Permits granted for private poultry slaughter houses.....	11
Applications withdrawn for private poultry slaughter houses	6
Applications laid over for private poultry slaughter houses	3
Applications rejected for private poultry slaughter houses.	5

REPORT OF DETAILED INSPECTOR TO HEALTH OFFICER—1914

Detailed to the Bacteriological Division to investigate suspected cases of rabies. A record in detail of each case and its subsequent history is kept on file at the laboratory. The following is a report of suspected cases of rabies for 1914:

Number of persons bitten by dogs.	501
Number of persons bitten by cats.....	8
Number of dogs bitten	93
Number of cats bitten	0
Number of original inspections	513
Number of re inspections	516
Number of dogs sent to City Pound... ..	130
Number of cats sent to City Pound	2
Number of dogs destroyed	106
Number of cats destroyed	2
Number of final inspections	505
Total number of inspections.....	1,534
Number of hours in court	90
Suspected animals' heads examined at the laboratory... ..	30
Animals found positive	7
Animals found negative	23

REPORT OF DISINFECTING CORPS 1914

HOUSES QUARANTINED

Diphtheria, including Membranous Group, placarded	1,497
Scarlet Fever, placarded.	1,695
Typhoid Fever, not placarded	242
Cerebro Spinal Meningitis.... .	16
Infantile Paralysis	7
Small Pox	1
Total number of cases	3,467

DISINFECTIONS

Diphtheria, including Membranous Group.	1,312
Scarlet Fever	1,525
Tuberculosis	516
Cerebro Spinal Meningitis	12
Infantile Paralysis	3
Small Pox	0
Special	807
Total number of houses.....	4,155
Number of rooms disinfected	12,978
Number of cubic feet of air space	12,978,000
Number of control tests	1,733
Number of visits to quarantined houses.	2,839
Number of nuisances found	88
Number of funerals supervised	49

REPORT OF INSPECTOR NURSES FOR THE YEAR 1911

Number of visits made	611
Number of new patients	588
Number of patients sent to hospital	37
Number of cases reported for fumigation	18
Number of deaths	88
Number of patients on hand	62
Number of adjustments made	27
Number of investigations	79
Number of patients referred to other clinics	118
Number of patients referred to Relief Bureau	6

REPORT MADE BY MISS MARY ANN W. DEGENS ON FEBRUARY 1, 1912

CITY DISPENSARY AND OUTDOOR POOR CONTINGENT

PERSONS TREATED AT THE FOLLOWING CLINICS

MONTH	Medical	Surgical	Skin Diseases	Syphilis	Gonorrhea's Discharges	Discharges of Women	Internal Organs	Heart, Lungs, and Nerves	Skin Diseases	Vaccinations	Prescriptions	Referrals	Discharges	Admissions	Deaths
January	70	47	38	10	5	8	17	3	11	1	10	1	8	2,637	3,163
February	64	36	60	14	1	1	2	1	11	1	1	1	1	2,620	3,431
March	21	11	1	1	1	1	1	1	1	1	1	1	1	2,409	3,106
April	6	12	1	1	1	1	1	1	1	1	1	1	1	2,643	3,101
May	11	110	10	1	1	1	1	1	1	1	1	1	1	2,081	4,101
June	12	10	10	1	1	1	1	1	1	1	1	1	1	2,803	3,943
July	10	10	10	1	1	1	1	1	1	1	1	1	1	3,083	4,063
August	10	10	1	1	1	1	1	1	1	1	1	1	1	1	1
September	571	808	245	190	150	96	428	61	164	144	85	86	10	1,111	1,111
October	68	8	1	1	1	1	1	1	1	1	1	1	1	1	1
November	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
December	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Totals	1,40	8,208	2,72	1,201	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111

PATIENTS SENT TO THE FOLLOWING HOSPITALS

	City	St Michael's	St Barnabas'	St James'	German	Beth Israel	Women's and Children's	Crippled Children	Eye and Ear Dispensary	Babies' Hospital	Eighth Ave. Day Nursery	Verona Sanitarium	Total
January	39	1	13	10	11	12	5	1	11	12	0	20	158
February	57	10	9	5	11	11	2	0	9	15	0	9	138
March	59	3	12	5	21	7	6	4	25	23	1	14	180
April	50	6	8	9	12	11	4	0	13	20	0	9	142
May	67	2	12	3	7	6	6	1	31	17	2	14	168
June	43	7	12	6	14	7	2	1	3	19	0	26	134
July	51	7	10	5	7	10	3	2	19	43	0	18	175
August	55	5	13	7	2	10	2	3	2	41	0	16	156
September	81	2	0	0	9	1	4	2	15	24	1	22	174
October	62	6	7	11	9	5	2	3	23	18	0	13	159
November	58	6	7	10	5	9	1	1	18	12	0	18	148
December	65	12	7	6	5	12	4	0	13	12	0	13	149
Totals	797	67	116	83	113	104	44	18	183	256	4	186	1,881

NUMBER OF DISTRICT PRESCRIPTIONS DISPENSED

DISTRICT	Jan	Feb	Mar	April	May	June	July	Aug	Sept.	Oct	Nov	Dec	Total
First	126	77	82	59	64	94	16	56	45	50	82	83	864
Second	54	64	60	30	32	24	27	20	18	32	32	57	450
Third	132	99	90	38	33	21	34	24	39	36	19	63	628
Fourth	111	81	96	72	53	11	56	19	58	19	96	81	879
Fifth	120	87	110	48	64	44	47	47	38	21	52	75	753
Sixth	63	68	56	47	28	15	19	22	17	24	16	38	413
Totals	639	476	494	294	274	239	229	218	215	212	297	440	3,987

RECAPITULATION.

Total number of patients treated	38,086
Total number of prescriptions	51,326
Total number of patients sent to hospitals	1,881

SUMMARY OF SERVICES RENDERED BY DISTRICT PHYSICIANS

	Dr Hill 1st Dist.	Dr Broadman 2nd Dist.	Dr Roodman 3rd Dist.	Dr Hastings 4th Dist.	Dr Fischer 5th Dist.	Dr Jeddel 6th Dist.	Total
Actual number of houses visited	686	186	662	688	1,141	506	3,969
Actual number of families visited	676	222	662	703	1,173	618	4,054
Number of sick prescribed for	658	311	823	684	1,572	609	4,667
Number of sick treated by others	7	1	11	11	70		100
Total number of visits made	1,285	1,098	1,247	1,058	1,706	826	7,220
Number sent to hospitals	65	28	48	8	259	88	616
Number of deaths	14	4	15	9	12	7	61

REPORT OF MEDICAL INSPECTION OF PAROCHIAL SCHOOLS

There are twenty-five parochial schools in the city of Newark, which are divided into five districts. Five physicians are detailed as Medical Inspectors of Parochial Schools, whose duties are to visit the parochial schools daily between the hours of 9 and 11 A. M., and make daily reports to the Health Officer.

1st DISTRICT DR. H. C. POVEY, 89 Mott Street

St. James' School, 185 Elm St	1,270 pupils
Our Lady of Mt. Carmel, 391 Market St.	250 "
St. Benedict's, 63 Komorn St	100 "
St. Aloysius', 36 Freeman St	250 "
St. Casimer's, 95 Tyler St	100 "
St. Mary Magdalene's, 65 North St	80 "
Total	2,000

2nd DISTRICT DR. H. G. MCBRIDE, 248 Mulberry Street.

St. Columbi's School, 38 Pennsylvania Ave	730 pupils
St. Bridget's, 404 Plane St	210 "
St. Mary's, 119 William St	300 "
St. Philip's, 21 Court House Pl.	145 "
St. John's, 33 Mulberry St.	194 "
St. Patrick's, 72 Central Ave.	721 "
Total	2,300

3rd DISTRICT—DR. M. J. COFFEY, 216 Bank Street.

St. Michael's, 172 Belleville Ave.	200 pupils
St. Lucy's, Amity Pl	200 "
St. Augustine's, Jay St	200 "
Sacred Heart, 88 Sixth Ave	200 "
St. Rose of Lima, 346 Orange St.	100 "
Our Lady of Good Counsel, 18 Heller Park way	200 "
Total	2,000

4th DISTRICT DR. P. J. CLARK, 391 So. Orange Avenue.

St. Joseph's School, 168 Hudson St.....	1,348	pupils
St. Antoninus', 319 South Ninth St.....	550	"
Sacred Heart, 1049 So. Orange Ave. (Vailsburg Section)	226	"
Total	2,124	

5th DISTRICT -DR. D. R. CAMPBELL, 22 Central Avenue.

St. Stanislaus' School, 120 Livingston St.	520	pupils
St. Peter's, 24 Livingston St.....	900	
St. Ann's, 380 So. Seventh St	500	"
St. Charles Borromeo's, 92 Custer Ave.....	234	"
Total	2,154	

Total number of pupils attending Parochial Schools in

Newark	12,261
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Report of Medical Inspection of Parochial Schools for the year 1914. This work was not done in January owing to insufficient funds:

Number of schools visited daily...	15
Number of visits made during year.	4,97
Number of pupils examined (male).	8,956
Number of pupils examined (female).	8,880
Total number of pupils examined.	17,156
Number of pupils excluded from school	122
Number of physical examinations (male).....	1,223
Number of physical examinations (female)	956
Total number of physical examinations.....	2,189

Diseases discovered during year by Medical Inspectors.

Measles	14
Mumps	1
Skin Disease	906
Scabies	5
St. Vitus' Dance.....	7
Malaria	3
Chicken Pox	1
Whooping Cough	1

BOARD OF HEALTH.

39

Eye Diseases	230
Ring Worm	2
Suppurative Ear Diseases	99
Tonsillitis	319
Other Diseases	1,985
Vernun	60
 Total	 3,695
Number of vaccinations made at the schools	1,680
Number of pupils advised to seek treatment.....	2,315
Class rooms inspected.....	4,624

RECEIPTS AND DISBURSEMENTS OF THE DEPARTMENT OF HEALTH FOR YEAR 1914

Total Receipts	\$175,844.75
Total Disbursements	175,844.75

Balance

Attention is called to the expenditures for furniture, fixtures, alterations, etc., under the Sanitary Department and Dispensary, the expenses are above the ordinary and were necessary on account of the removal of the City Dispensary from the old quarters at 880 Broad Street and the City Dispensary from above the Centre Market to the new Health Building at William and Plane Streets.

RECEIPTS

Appropriations by Common Council	\$ 240.00
Penalties collected by Courts	184.55

SANITARY DEPARTMENT

Animal Permits	\$ 1.00
Chicken Permits	1.00
Chicken Slaughter House	1.00
Ice Licenses	1.00
Ice Licenses, Plates	1.00
Sun Lises	1.00
	— — — \$ 4,125.72

PLUMBING DEPARTMENT

Plumbing Permits	\$ 3,710.00
Salary, Refund	25.00
	— — — \$ 3,735.00

PLUMBING DEPARTMENT.

Plumbing Permits	\$ 3,710.00
Salary, Refund	25.00
	— — — \$ 3,735.00

BACTERIOLOGICAL LABORATORY

Anti-toxin Sales	\$ 87.00
Bacteriological Examinations	520.00
Rabies Treatment	1.00
Sale of Horses (2)	180.00
	\$ 1,608.00

DISPENSARY

Sale of Vaccine	\$ 7.14
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TUBERCULOSIS SANATORIUM.

Sale of Thermometers	\$ 86.00
Sale of Grease	34.42
Use of Telephone	8.60
	\$ 129.02
Total	\$ 75,847.02

DISBURSEMENTS—SALARIES

SANITARY DEPARTMENT.

Health Officer	\$ 5,000.00
Superintendent Bureau Contagious Diseases...	1,240.00
Clerks (5)	800.00
Stenographers (2, one part time)	1,349.90
Telephone Operator	600.00
Detailed Inspectors (2)	310.00
Sanitary Inspectors (19)	2,250.00
Sanitary Inspectors (2 retired)	1,414.58
Meteorologist	120.00
Inspector Nurses (2)	1,680.00
Janitor	765.71
Porter	635.65
	\$ 45,385.17

HEAT, LIGHT, RENT AND WATER.

Coal	\$ 227.60
Electric Light	260.65
Gas	1.80
Rent of old offices (lease expired June 1, 1914)	1,045.14
Water	45.72
	\$ 1,869.21

TELEPHONES

Offices	\$1,224 19
Health Officer's residence	73 00
	\$ 1,297 19

FURNITURE AND FIXTURES

Waste Baskets	\$ 785
Medicine Cabinet	10 49
Carpets and Rugs	177 20
Telephone Stand	3 85
Desk	37 00
Chairs	120 55
Costumers	29 25
Rake	1 75
Paper Holders	1 41
Brush	63
Coat Hanger	2 50
Cuspidors	3 30
Soap Dishes	51
Towel Rack	55
Combs and Brushes	4 40
Curtains	1 95
Hamper	2 04
Map Frames	1 95
Steel Shelving	246 24
Addressograph	61 34
Stools	57 45
Filing Cabinets	111 65
Fire Extinguisher	7 00
Rubber Matting	275 74
Window Shades	194 45
Awnings	117 00
Medical Books	11 20
Adding Machine	35 00
Rubber Clothes	30 25
Typewriter	84 83
	\$ 1,636 89

IMPROVEMENTS, REPAIRS AND ALTERATIONS.

Carpenter Work	\$ 152 22
Painting	119 00
Lumber	142 28
Hardware	105 20

BOARD OF HEALTH.

43

Glass	3 25
Cleaning Carpets	7 02
Keys	21.55
Electric Supplies	6.01
Repairing Chairs	31 50
Repairing Brush.....	1.00
Repairing Lights	2 85
Repairing Fans	18 10
Plumbing Work	20 80
Takinn dowg Awnings....	7.50
Whitewashing Elevator Shaft	21.00
Table Padding	3.27
Paints and Oils	63 81
	————— \$ 726 38

TRAVELLING EXPENSES

Car fares	\$ 134.00
Inspecting Water Sheds.....	119 20
To Trenton (Legislative Committee)	210 70
Delegates to Jacksonville, Fla., American Health Association Convention.....	390 00
Inspector Nurses, Convention at Asbury Park.	10 00
	————— \$ 863 91

JANITORS' SUPPLIES

Cleaning Compounds	\$ 23.07
Sweeping Compounds	30.75
Candles	1.68
Cheese Cloth	24.50
Brooms, Brushes and Mops....	19 00
Salt ..	1 20
Disinfectant	8.00
Ammonia	4.06
Furniture Polish ..	1.30
Cleaning Windows	120 00
Cleaning Sidewalk .....	.50
	————— \$ 234 06

MISCELLANEOUS SUPPLIES

Towel Supply .	\$ 78.1
Moving Expenses	70.50
Advertising	6.00
Inspecting Typewriters .	25.00
Stationery	176.25
Postage Stamps	20.00
Postal Cards .	65.00
Reporting Contagious Diseases	136.00
Freight and Express	8.80
Cartage ..	0.00
Glanders Straps and Presses	8.00
Flowers	1.00
Insurance	80.00
Cab Hire	2.00
Legislative Bills .	25.00
Bond Premium .	20.00
Uniform Buttons	12.00
Drinking Cups	0.00
Directories	2.00
Sputum Cups	25.00
Expenses, Typhoid outbreak	0.00
Expenses	70.00
Expenses, Health Association	0.00
Printing Annual Reports...	1,028.20
Subscriptions to Publications	8.00
Postage	32.00
Postage	12.00
Postage	0.00
	\$ 3,000.00
Total	\$ 3,000.00

PLUMBING DEPARTMENT -SALARIES

Chief Plumbing Inspector...	\$ 1,700.00
Plumbing Inspectors (6, one part time)	7,846.78
	\$ 9,546.78

MISCELLANEOUS EXPENSES

Stationery	\$ 17 50
Expenses, delegate to convention at Manne- apolis	1 00
Flashlights	2 80
Dating Stamp	1 00
Expenses to New York (two trips)	2 70
	\$ 120 00
Total	\$ 120 00

FOOD AND DRUG DEPARTMENT—SALARIES

Chief Food and Drug Inspector.	.\$ 1,641.33
Food and Drug Inspectors (3)	3,924 00
Chemist	2,400 00
Veterinarian	2,400 00
Meat Inspector ..	1,111 00
	—\$ 11,718 33

MISCELLANEOUS EXPENSES

Bottles	.. .. . \$ 11 45
Corks	15 00
Food and Milk Samples	10 00
Car-fares	12 00
Scoring Dairies	36 20
Automobile Supplies and Maintenance	868 00
Expenses to Trenton.	19 62
Seal	3 00
Stationery	127 25
Travelling Bags	31 00
Pure Food Book.	15 00
Lactometer	1 75
Milking Stools	3 22
Pans	3 65
Chemicals	8 00
Milk License Signs.	84 00
	—\$ 1,670 59
Total	.\$ 13,388 92

DISINFECTING DEPARTMENT—SALARIES.

Chief Inspector	\$ 1,700 00
Inspectors (9, one part time).	10,350 00
	<hr/> \$ 12,050 00

MISCELLANEOUS EXPENSES

Hose and Burner.....	\$ 7 92
Matches	7 24
Cotton Batting	132 27
Disinfectants	711.62
Corks	2 23
Gauze	1.50
Stationery	189 86
Twine	1 90
Rubber Gloves	18 00
Expenses to Long Island City (four trips)....	7.00
Car-fares	1.30
Generator repairs	60.30
Generator Bags	34 00
Whisk Brooms	3 95
Funnels	4 01
Bottles	3.10
Flashlights	6.65
Screw Drivers and Putty Knives	5 61
Hardware	1, 10
	<hr/> \$ 1, 92 88
Total	<hr/> \$ 14, 92 88

DISPENSARY—SALARIES

Apothecary	\$ 2,300 00
Assistant Apothecary	1,900 00
Assistant Apothecary	1,060 89
Dentist	300.00
Janitor	720 00
Nurse	820 00
Sanitary Inspector (detailed).....	1,200 00
District Doctors (6).	4,078 07
Parochial School Doctors (5).	2,361 30
	<hr/> \$ 14,740 26

BOARD OF HEALTH.

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LIGHT, HEAT, ETC.

Coal	\$ 227 60	
Electric Light	260 65	
Water	45 73	
Gas63	
	—————\$	534 61

FURNITURE AND FIXTURES.

Rubber Matting	\$ 149 11
Rugs	126 27
Chairs	233 50
Tables	416 92
Benches	551 00
Desks	636 00
Cabinets	193 16
Toilets (Genito-Urinary Clinic)	312 32
Pharmacist Bottles	108 45
Clock	18 00
Hand Rails	24 00
Sign (showing the various Clinics)	500 00
Sliding Enclosure	500 00
Sterilizer	150 00
Stools	21 00
Couch	40 00
Costumers	19 98
Mirrors	21 00
Screens	71 90
Cushions	10 50
Crutches	10 00
Hamper	3 74
Soap Dishes	3 18
Paper Holder	3 00
Gas Plate	7 20
Garbage Cans	6 77
Desk Set	1 80
Thermometers	1 70
Glasses	2 40
Blanket	2 00

Percolator . . . . .	.75
Basins, Pails, Pans.....	39 23
Doctors' Gowns	76 80
Stretcher	5 40
Brackets	9.00
Stirrups	5 00
Ladder	3 00

\$ 150.18

IMPROVEMENTS, ALTERATIONS AND REPAIRS.

Painting	\$ 77.00
Carpenter Work	246 05
Lumber	94 63
Electrical Supplies	41.94
Paints and Oils.....	4.35
Repairing Lights	16 23
Cleaning Rug	2 88
	<hr/> \$ 483 08

MISCELLANEOUS EXPENSES

Telephone Service	\$ 249 00
Surgical Supplies	50 17
Bandages, Cotton, Gauze	41 46
Drugs	26 58
Scrub Women	3 75
Towel Supply	12 16
Laundry Work	24 51
Insurance	5 71
Pharmacists' Fees	1 00
Stationery	16 70
Sewing	1 51
Directory	6 00
Ice	7 50
Drinking Cups	10 00
Vaccine	18 11
Cleaning Compounds	16 72
Camera Supplies	13 51
	<hr/> \$ 725 81
To a	<hr/> \$ 1,208 89

BACTERIOLOGICAL LABORATORY -SALARIES

Bacteriologist	\$ 4 00 00
Assistant Bacteriologist	1 00 00
Assistant Bacteriologist	1,524 00
Pathologist	1 00 00
Culture Collectors (2)	2 00 00
Porter	480 00
	—————\$ 11,504 00

STABLE EXPENSES

Boarding Horses (7).....	\$ 2,108 33
Horseshoeing	166 75
Needles	4 00
Clipping	3 00
Blankets	17 22
Halters	6 50
	—————\$ 2,305 83

MISCELLANEOUS EXPENSES

Stationery	\$ 238 46
Mailing Boxes	155 34
Chemicals	21 44
Motor	22 00
Rabbits	322 00
Guinea Pigs	313 00
Postage Stamps	22 00
Anti toxin Syringes	25 00
Apparatus and Glassware.	25 00
Car-fares	41 00
Carrying Case	1 00
Freight and Express	6 40
Polishing Material .	1 00
Rabies Virus	40 00
Records	10 00
Microscope	2 00
Plumbing Work .	13 47
Wire Baskets ..	2 20
Repairs to Regulator.	1 00
	—————\$ 2,482 45
Total	\$ 4,292 28

CHILD HYGIENE DEPARTMENT—SALARIES.

Director	\$ 1,290 00
Clinic Physician	300 00
Hygiene Teachers (3)	2,313 83
Stenographer	72 00
Supervisor of Midwives	105 00
Copyist	46 00
	<hr/> \$ 4,684 83

MISCELLANEOUS EXPENSES

Stationery	\$ 437 69
Telephone Service	82 33
Postage Stamps	101 57
Rent of Offices	259 02
Compo Board	7 00
Hardware	1 09
Nurses' Car fares and Expenses.	98 94
Toilet Supplies	2 47
Photo Supplies	6 00
Typewriter	129 60
Reports	25 00
Badges	3 00
Director's expenses to Boston	25 00
Benches	82 50
	<hr/> — \$ 1 262 11
Total	<hr/> \$ 5 946 94

RECAPITULATION.

Sapitary Department	\$ 58,141 05
Plumbing Department	9,675 81
Food and Drug Department	13,388 92
Disinfecting Department	13,262 88
Dispensary	24,330 12
Bacteriological Laboratory	16,292 28
Child Hygiene Department.	5,946 94
Tuberculosis Sanatorium (see separate report)	34,806 75
	<hr/> — \$175,844 75

ANNUAL REPORT
OF THE
Division of Bacteriology

REPORT OF DIVISION OF BACTERIOLOGY

Mr. D. D. Chandler, Health Officer.

DEAR SIR: Herewith is respectfully submitted the report of the Division of Bacteriology for the year ending December 31, 1914.

During the past year the number of specimens of various kinds examined at the laboratory exceeded by over 2,700 the number received in 1913. This increase occurred mainly in cultures from cases of suspected typhoid and specimens of blood from cases suspected of being typhoid or malaria.

The records for the year show a decided decrease in the number of persons who required preventive antirabic treatment—only 14 as compared with 41 in 1913. During 1914 only 7 animals were found infected with rabies, while in 1913, 17 were discovered, and there is reason to believe that 2 and possibly 3 of the infected cases of 1914 came from outside of Newark after the animals had become mad.

I feel certain that this decrease in rabies in Newark is due to the vigorous manner in which the Board of Health follows each case of reported dog bite, and urges the extermination of all animals that have been bitten or oth

erwise exposed to infection. One instance of this character may be mentioned—a rabid dog ran through a large section of the city, and during his mad run, which lasted about two hours, he bit 27 dogs and several cats. After a thorough investigation all of these animals were destroyed with the consent of the owners.

The following table shows the routine work of the laboratory for 1914:

BACTERIOLOGICAL LABORATORY RECORD FOR 1914

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Diphtheria													
Primary cultures examined	385	711	644	665	629	702	577	566	517	612	694	732	7,960
True cases	165	169	84	83	87	98	83	43	57	111	198	196	1,137
Total number of cultures examined	1,440	1,085	1,860	1,763	1,737	1,861	1,705	1,638	1,578	1,735	1,891	1,879	9,698
Diphtheria Antitoxin -													
On hand January 1.....	215												
Number of doses produced	538	551	585	100	328	155	0	0	328	473	188	1,022	5,163
Number of doses distributed	549	536	633	264	292	320	326	139	258	378	518	491	4,507
Tuberculosis													
Specimens of sputa examined..	209	206	245	258	251	169	158	180	170	191	189	208	2,414
Specimens containing tubercle bacilli	50	43	46	56	67	49	37	46	59	51	61	52	617
Blood examination (typhoid and malaria)	54	53	74	82	82	91	563	141	113	118	59	41	1,461
Water examinations	10	17	22	24	40	29	16	31	25	23	23	17	277
Milk examinations	77	50	76	99	87	80	61	50	69	98	67	56	813
Disinfection tests	130	112	227	206	185	180	165	91	53	80	121	120	1,729
Typhoid vaccine distributed	33	3	2	20	80	40	190	108	35	14	0	0	525
Specific enteric infection	26	27	14	10	77	69	63	77	45	49	48	41	582
Rabies													
Persons given antirabic treatment	5	0	5	0	0	0	2	2	0	0	0	0	11
Suspected animals examined	2	3	1	2	2	3	6	3	4	1	0	3	30
Animals found infected	0	1	0	1	0	1	2	1	0	0	0	1	7
Persons bitten by animals and cases investigated by detailed inspector	22	25	32	28	32	84	71	61	40	30	32	27	500

DIPHTHERIA AND ANTITOXIN.

There were 1,498 cases of diphtheria reported in Newark during 1914 and of this number 1,416 cases received antitoxin. In 1914 the treatment of diphtheria with antitoxin, with a mortality of 78 cases, or 5½%.

Our records show that 82 cases did not receive diphtheria antitoxin, and of these 11 died, which gives 13.4% for non-antitoxin treated cases.

The following table shows the results of treating diphtheria with and without antitoxin in Newark and covers a period of twenty years, the first fifteen of which are grouped into five-year periods:

DIPHTHERIA.

Antitoxin Used				Antitoxin Not Used			
Period	Cases	Deaths	%	Period	Cases	Deaths	%
1895 to 1900	3,296	357	10.8	1895 to 1900	2,444	528	21.6
1900 to 1905	5,070	365	7.2	1900 to 1905	1,289	256	19.8
1905 to 1910	5,348	323	6.0	1905 to 1910	622	144	23.0
Year				Year			
1911	1,552	80	5.1	1910	173	24	18.0
1911	1,217	57	4.5	1911	92	18	19.5
1912	1,675	66	3.9	1912	93	15	16.12
1913	1,188	80	6.7	1913	107	21	20.0
1914	1,416	78	5.5	1914	82	11	13.4

TUBERCULOSIS

This disease appears to pursue a steady course in so far as the advent of new cases is concerned. Each year fresh victims are discovered for infection to take the place of those who die from the disease. It is surprising and disappointing to find how the number of new cases keeps pace with the death rate for tuberculosis.

The specimens examined at the laboratory are from various forms of the disease, i. e., pulmonary, genito-urinary, meningeal, etc., and except for a small percentage there are few re-examinations, so that the specimens in which tubercle bacilli are found usually represent cases that are reported for the first time.

Therefore, if we take the records of deaths for all forms of tuberculosis in Newark for the last ten years and compare the numbers with the laboratory examinations year by year, we are forced to the conclusion that as the Grim Reaper gathers his harvest of death each year, the seed has been already sown for a harvest of equal size for the next year.

TABLE SHOWING DEATHS FROM TUBERCULOSIS AND DISCOVERY OF NEW CASES OF THE DISEASE.

YEAR	Deaths from Tuberculosis (all forms)	Specimens Showing Tubercle Bacilli Indicating New Cases of Tuberculosis
1905	781	753
1906	851	740
1907	797	751
1908	795	727
1909	761	858
1910	812	771
1911	707	686
1912	596	797
1913	733	720
1914	665	617

In studying the following report, which has been prepared by Dr. Thomas H. Ripley, Assistant Bacteriologist, it will be noticed that there is a striking disproportion between the number of males and females attacked by tuberculosis.

To R. N. Connolly, M. D., Bacteriologist

TABLE 88.—The records of the laboratory for 1914 show that 2,414 examinations were made from suspected cases of tuberculosis, 617 of these contained tubercle bacilli and 1,797 were negative.

The following table for the past 17 years shows the total number of examinations made and the number of positive and negative cases found, together with the percentage of positive cases recorded.

YEAR	Positive	Negative	Total	Percentage of Positive Cases
1898	312	378	690	45
1899	308	491	799	38
1900	380	622	1,003	37
1901	366	594	960	38
1902	796	746	1,542	51
1903	1,030	1,041	2,071	49
1904	804	959	1,763	45
1905	753	1,021	1,774	42
1906	740	1,385	2,125	34
1907	751	1,425	2,176	34
1908	727	1,380	2,107	34
1909	858	1,663	2,521	34
1910	771	1,746	2,517	30
1911	686	1,649	2,335	29
1912	797	1,820	2,617	30
1913	720	1,900	2,620	27
1914	617	1,797	2,414	37

THE FOLLOWING TABLE FOR THE LAST NINE YEARS SHOWS THE SEX AND TIME OF LIFE IN WHICH TUBERCULOSIS OCCURS:

YEAR	1 to 10 years		10 to 20 years		20 to 30 years		30 to 40 years		40 to 50 years		50 to 60 years		60 plus years	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1906			26	29	110	73	97	56	71	17	33	5	8	
1907			25	21	116	71	112	37	59	20	25	5	6	1
1908			40	20	138	72	123	57	68	22	27	11	5	
1909			28	32	151	82	133	62	111	36	35	8	18	
1910			27	20	100	75	107	60	58	23	22	12	5	
1911			5	1	17	37	115	33	60	14	25	8	7	
1912			8	4	13	68	161	77	90	18	51	4	16	
1913			2	2	7	76	139	78	74	28	50	6	12	6
1914			7	7	81	76	110	70	58	20	32	11	6	
Per Cent.	.002		.065		.23		.30		.16		.07		.023	

The records for the year 1914 show that 97 victims had cases of consumption in the family

Respectfully submitted,

DR. THOMAS H. RIPLEY,
Assistant Bacteriologist

BACTERIOLOGICAL EXAMINATION OF NEW-ARK CITY WATER SUPPLY.

During 1914 the usual semi-monthly examinations of the Pequannock water were carried on. The samples were taken from the same sampling points as in previous years in order to permit comparison with the results of former tests, and the detailed and general results, which are given in the following tables, indicate that the Pequannock water is maintaining its reputation for purity.

The fermentation tests for presumptive evidence of the presence of colon bacilli were performed in every case by using glucose bouillon for one set of tests and lactose bile duplicates with each sample.

These tests we have found to give almost identical results, as they grade each other very closely; although the glucose bouillon appears to be slightly the more sensitive.

The table of yearly averages of the bacterial content shows a slight increase for 1914. This, however, is largely due to disturbed conditions in the water main, caused by a break in the pipes near Cedar Grove Reservoir, which occurred in March, and was quickly remedied.

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK WATER DURING 1914.

Samples from Oak Ridge Stream, above Clinton Stream.

1914	Bact. Per C. C.	Amount of Sample Causing Fermentation in Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C. C.	C. C.
Feb 10	520	—	—	—	—	—	—
Mar 18	1,160	—	—	—	—	+	+
Mar 31	2,500	—	—	—	—	—	—
Apr 14	250	—	—	—	—	—	—
Apr 28	260	—	—	—	—	—	—
May 13	800	—	—	—	—	+	+
May 27	2,700	—	—	—	+	+	+
June 10	440	—	—	—	—	+	—
June 24	1,680	—	—	—	—	+	+
July 22	1,800	—	+	+	+	+	+
Aug 12	1,150	+	+	+	+	+	+
Aug 19	6,300	—	+	+	+	+	+
Sept 9	800	—	—	—	+	+	+
Sept 22	800	—	—	—	—	+	+
Oct 14	720	+	+	+	+	+	+
Oct. 28	380	—	—	+	+	+	+
Nov 11	1,950	—	—	—	+	+	+
Nov 23	1,200	—	—	+	+	+	+
Dec. 24	700	—	—	—	—	—	+

The sign (-) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914—Continued.

Samples from Clinton Stream, above Oak Ridge Stream.

1914	Bact Per C. C.	Amount of Sample Causing Fermentation in Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C. C.	C. C.
Feb 10	110	—	—	—	—	—	—
Mar. 18	1,040	—	—	—	—	—	+
Mar 31	570	—	—	—	—	—	—
Apr 14	240	—	—	—	—	—	—
Apr. 29	190	—	—	—	—	—	+
May 13	205	—	—	—	—	+	+
May 27	2,500	—	+	+	+	+	+
June 10	1,770	—	+	+	+	+	+
June 24	1,890	—	+	+	+	+	+
July 22	5,700	—	+	+	+	+	+
Aug 12	1,850	+	+	+	+	+	+
Aug 19	3,700	—	+	+	+	+	+
Sept. 9	60	—	—	+	+	+	+
Sept 22	1,500	—	—	+	+	+	+
Oct 14	1,560	—	—	+	+	+	+
Oct 28	250	—	—	—	—	+	+
Nov. 11	530	—	+	+	+	+	+
Nov. 23	550	—	—	—	—	+	+
Dec. 23	500	—	+	+	—	+	+

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914 Continued.

Samples from Kanouse Creek, above Pequannock River.

1914	Baet. Per C. C.	Amount of Sample Causing Fermentation in Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		<u>2</u>	<u>10</u>	<u>5</u>	<u>2</u>	<u>C. C.</u>	<u>C. C.</u>
Feb. 10	1.6						
Mar. 18	.60		—	—	—	+	+
Mar. 21	.50				—		
Apr. 21	1.8						
Apr. 29	1.0		—	—		+	+
May 2	.20		—	—	—	—	+
May 23	1.50		+	+	+	+	+
June 1	.5	—	—	—	+	+	+
June 23	1.470	—	+	+	+	+	+
July 22	2.80	—	+	+	+	+	+
Aug. 12	1.70	—	+	+	+	+	+
Aug. 20	1.00	—	+	+	+	+	+
Sept. 9	.820	—	—	—	+	+	+
Sept. 22	.65	—	—	—	—	+	+
Oct. 14	1.80		—	+	+	+	+
Oct. 28	.7	—	+	+	+	+	+
Nov. 11	.20	—	—	—	+	+	+
Nov. 20	.60	—	—	—	—	+	+
Dec. 2	.85		—	—	—	—	+

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914—Continued.

Samples from Echo Lake Stream, above Pequannock River

1914	Bact Per C. C.	Amount of Sample Causing Fermentation in					
		Glucose Bouillon and Lactose Bile					
		1 20	1 10	1 5	1 2	1 C. C.	5 C. C.
Feb. 6	100	—	—	—	—	—	—
Mar. 18	1,230	—	—	—	—	—	+
Mar. 31	870	—	—	—	—	—	—
Apr. 11	230	—	—	—	—	—	—
Apr. 29	11	—	—	—	—	—	+
May 13	180	—	—	—	—	+	+
May 27	500	—	+	+	+	+	+
June 10	1,100	—	—	—	—	+	+
June 24	1,560	—	—	—	—	—	—
July 22	2,400	—	—	—	—	+	+
Aug. 12	1,600	—	+	+	+	+	+
Aug. 19	9,000	+	+	+	+	+	+
Sept. 9	240	—	—	—	—	+	+
Sept. 22	600	—	—	—	—	—	+
Oct. 14	840	—	—	+	+	+	+
Oct. 28	830	—	+	+	+	+	+
Nov. 11	340	—	—	—	—	—	+
Nov. 23	570	—	—	—	—	—	+
Dec. 23	350	—	—	—	—	—	+

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914 Continued
Samples from Macopin Intake, at Gatehouse.

1914	Bact Per C. C.	Amount of Sample Causing Ferment- ation in					
		Glucose	Bol. Lon.	old	Lactose	Bol.	
		1 20	1 10	1 5	1 2	1 C.C.	1 C.C.
Feb 10	20	—	—	—	—	—	—
Mar 18	50	—	—	—	—	—	+
Mar 27	200	—	—	—	—	—	—
Apr 14	210	—	—	—	—	—	—
Apr 29	40	—	—	—	—	—	+
May 15	40	—	—	—	—	+	+
May 27	500	—	+	+	+	+	+
Jun 10	220	—	—	—	—	+	+
Jun 22	200	—	—	—	—	—	+
July 22	70	—	—	+	+	+	+
Aug 10	140	—	—	+	+	+	+
Aug 19	820	—	—	—	+	+	+
Sept 9	50	—	—	—	—	—	+
Sept 22	780	—	—	—	—	—	+
Oct 1	10	—	—	—	+	+	+
Oct 28	80	—	—	—	+	+	+
Nov 11	120	—	—	—	—	—	—
Nov 25	710	—	—	—	—	+	+
Dec 20	60	—	—	—	—	+	+

The sign (—) means no fermentation produced

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914 Continued.

Samples from Cedar Grove Reservoir, Inlet Gatehouse.

1914	Bact Per C. C.	Amount of Sample Causing Fermentation in					
		Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C C	C C
Jan 28	210	—	—	—	—	—	+
Feb 16	270	—	—	—	—	—	—
Mar 18	160	—	—	—	—	—	—
Mar 31	180	—	—	—	—	—	—
Apr 14	9	—	—	—	—	—	—
Apr 29	80	—	—	—	—	—	—
May 13	120	—	—	—	—	+	+
May 27	130	—	—	—	+	+	+
June 10	150	—	—	—	—	+	+
June 24	355	—	—	—	—	—	+
July 12	32	—	—	—	—	—	+
Aug 12	190	—	—	+	+	+	+
Aug 19	340	—	—	+	+	+	+
Sept 9	62	—	—	—	—	+	+
Sept 22	34	—	—	—	—	—	+
Oct 12	200	—	—	—	—	+	+
Oct 28	44	—	—	—	+	+	+
Nov 11	13	—	—	—	—	—	+
Nov 27	180	—	—	—	—	—	+
Dec 23	400	—	—	—	—	—	+

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK WATER DURING 1914 Continued.

Samples from Cedar Grove Reservoir Outlet Catchment

1914	Bact Per C. C.	Amount of Sample Causing Fermentation in					
		Glucose		Bouillon		and Lactose B.	
		1	1	1	1	1	5
		20	10	5	2	C. C.	C. C.
Jan. 28	0	—	—	—	—	—	—
Feb. 16	200	—	—	—	—	—	—
Mar. 31	200	—	—	—	—	—	—
Apr. 13	20	—	—	—	—	—	—
Apr. 20	100	—	—	—	—	—	+
May 13	50	—	—	—	—	—	—
May 27	40	—	—	—	—	—	+
June 10	100	—	—	—	—	—	+
June 24	60	—	—	—	—	—	—
July 22	150	—	—	—	—	+	+
Aug. 12	300	—	—	—	—	—	+
Aug. 19	220	—	—	—	+	+	+
Sept. 9	14	—	—	—	—	+	+
Sept. 29	1	—	—	—	—	—	—
Oct. 14	22	—	—	—	—	—	+
Oct. 28	40	—	—	—	—	—	+
Nov. 1	24	—	—	—	—	—	+
Nov. 20	500	—	—	—	—	—	+
Dec. 23	280	—	—	—	—	—	+

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

**BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914** Continued.

Samples from Belleville Reservoir, at Inlet Gatehouse.

1914	Bact Per C C	Amount of Sample Causing Fermentation in Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C. C.	C C.
Jan 11	120			-			
Jan 28	220						+
Feb 10	160						
Feb 25	200	-	-	-			
Mar. 18	360	-	-	-	-	-	-
Mar 31	* 1, 50	-	-	-		-	+
Apr 14	180	-	-	-		-	+
Apr 29	80	-	-		-	-	-
May 13	110	-	-	-	-	-	-
May 27	60	-	-	-	-	-	
June 1	60	-	-	-	-	-	+
June 24	150	-	-	-	-	-	+
July 22	180	-	-	-	-	-	+
Aug 12	4	-	-	-	-	-	+
Aug 19	500	-	+	+	+	+	+
Sept 9	14	-	-	-		+	+
Sept 22	60	-	-	-	-	-	-
Oct 11	90	-	-	-	-		+
Oct. 28	140	-	-	-	-		+
Nov 11	280	-	-	-		-	+
Nov 25	130	-	-	-		-	+
Dec. 3	21	-	-	-	-	-	+

*This was probably due to an accident in the main from Cedar Grove Reservoir which occurred on March 29th.

The sign (-) means no fermentation produced.

The sign (+) means fermentation produced

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914 Continued.

Samples from Belleville Reservoir, at Outlet Gatehouse.

1914	Bact. Per C. C	Amount of Sample Causing Fermentation in					
		Glucose Bouillon		and Lactose Bile		C C	C C
		1	1	1	1		
		20	10	5	2	C C	C C
Jan 1	22		-				+
Jan 8	18			-			+
Feb 10	10	-	-	-			+
Feb 25	11		-	-			-
Mar 18	10						
Mar 31	20	-	-	-		-	-
Apr 14	16			-			
Apr 29	15			-			
May 13	12					-	+
May 27	5		-	-		-	
Jun 10	2					-	+
Jun 25	10					-	+
July 22	22					+	+
Aug 12	25			+	+	+	+
Aug 19	110	+	+	+	+	+	+
Sept 9	80	-				-	-
Sept 22	5					-	-
Oct 14	7			-		-	
Oct 28	120	-	-			+	-
Nov 11	130	-		-			+
Nov 23	50		-			-	+
Dec 23	20						+

The sign (-) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914 Continued.

Samples from the Board of Health Office,
Plane and William Streets.

1914	Bact Per C. C	Amount of Sample Causing Fermentation in					
		Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C C	C C
Jan 14	80						+
Jan 28	110						
Feb 10	75						
Feb 25	75						
Mar 18	100						
Mar 31	* 100						
Apr 11	110						
Apr 29	75						
May 13	25						
May 27	30						
June 6	20						
June 21	57						
July 22	160						+
Aug 12	70		—				+
Aug 19	160	—	—		—	—	—
Aug 21	170	—	+	+	+	+	+
Aug 26	170	—	—	+	+	+	+
Sept 9	90	—	—	—			+
Sept 20	20					—	—
Oct 11	60					—	
Oct 28	62		—			—	+
Nov 11	60		—		—		+
Nov 23	150		—	—	—		+
Dec. 2	40	—		—			—
Dec 23	70						+

* This was probably due to an accident in the main from Cedar Grove Reservoir, that occurred on March 29th

The sign (—) means no fermentation produced

The sign (+) means fermentation produced

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK
WATER DURING 1914—Continued

Samples from Laboratory Faucet, City Hospital.

1914	Bact Per C. C	Amount of Sample Causing Fermentation in					
		Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C.C	C.C
Jan 14	130	-	-	-	-	-	-
Jan 28	30	-	-	-	-	-	-
Feb 10	130	-	-	-	-	-	-
Jan 29	130	-	-	-	-	-	-
Mar 18	160	-	-	-	-	-	-
Mar 29	130	-	-	-	-	-	-
Mar 31	60	-	-	-	-	-	-
Apr 12	30	-	-	-	-	-	-
Apr 14	140	-	-	-	-	-	-
Apr 25	170	-	-	-	-	-	-
Apr 29	60	-	-	-	-	-	-
May 13	70	-	-	-	-	-	-
May 19	70	-	-	-	-	-	-
May 21	70	-	-	-	-	-	-
May 27	20	-	-	-	-	-	-
June 1	80	-	-	-	-	-	-
June 5	20	-	-	-	-	-	-
June 8	20	-	-	-	-	-	-
July 1	38	-	-	-	-	-	-
July 18	70	-	-	-	-	-	-
July 22	100	-	-	-	-	-	-
June 24	180	-	-	-	-	-	-

BACTERIOLOGICAL EXAMINATION OF PEQUANNOCK WATER DURING 1914 Continued.

Samples from Laboratory Faucet, City Hospital Continued

1914	Bact. Per C. C	Amount of Sample Causing Fermentation in Glucose Bouillon and Lactose Bile					
		1	1	1	1	1	5
		20	10	5	2	C C.	C C
July 10	120	—	—	—	—	—	+
July 15	1.5	—	—	—	—	—	+
July 20	120	—	—	—	—	—	—
July 21	150	—	—	—	—	—	+
July 24	60	—	—	—	—	—	—
July 28	100	—	—	—	—	+	+
Aug 12	80	—	—	—	—	—	+
Aug. 14	80	—	—	—	+	+	+
Aug 19	140	—	—	—	+	+	+
Aug 21	140	—	—	+	+	+	+
Aug 24	160	—	—	—	+	+	+
Aug 26	90	—	—	—	+	+	+
Sept 9	180	—	—	—	—	+	+
Sept 22	20	—	—	—	—	—	—
Sept 28	60	—	—	—	—	+	+
Oct 14	60	—	—	—	—	—	—
Oct. 28	70	—	—	—	—	+	+
Nov. 5	70	—	—	—	—	—	—
Nov 11	80	—	—	—	—	—	+
Nov 23	70	—	—	—	—	—	—
Dec 2	80	—	—	—	—	—	—
Dec. 23	90	—	—	—	—	—	—

* This was probably due to an accident in the main from Cedar Grove Reservoir, that occurred on March 29th

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

AVERAGE NUMBER OF BACTERIA PER CUBIC CENTIMETER IN THE PEQUANNOCK
WATER AT THE SAMPLING POINTS FOR SIX YEARS

ORIGIN OF SAMPLES	1909		1910		1911		1912		1913		1914	
	Number of Samples	Average of Bacteria Per C. C.	Number of Samples	Average of Bacteria Per C. C.	Number of Samples	Average of Bacteria Per C. C.	Number of Samples	Average of Bacteria Per C. C.	Number of Samples	Average of Bacteria Per C. C.	Number of Samples	Average of Bacteria Per C. C.
Oak Ridge Stream, above Clinton Stream	21	1,021	22	1,019	21	1,102	22	18,09	25	1,11	19	1,11
Clinton Stream, above Oak Ridge Stream	21	1147	22	1470	21	1,379	22	1,159	23	877	19	1,32
Kanouse Creek, above Pequannock River	21	2,435	22	1,764	21	1,776	22	12,11	25	1,028	19	1,159
Echo Lake Stream, above Pequannock River	21	1,116	22	2,037	21	1,115	22	1,016	23	746	19	1,111
Macopin Intake, at Gatehouse	21	1,657	22	790	21	1,552	22	655	23	1,133	19	569
Cedar Grove Reservoir, at Inlet Gatehouse	21	464	25	361	22	140	15	360	23	282	20	250
Cedar Grove Reservoir, at Outlet Gatehouse	21	313	23	260	22	288	26	287	23	268	19	215
Belleville Reservoir, at Inlet Gatehouse	21	311	26	1,00	22	255	29	275	23	192	22	264
Belleville Reservoir, at Outlet Gatehouse	26	315	25	216	25	211	29	267	25	142	22	264
Board of Health Office, Place and William Sts.	21	95	27	90	22	152	32	188	23	90	25	120
Laboratory Faucet, City Hospital	21	117	28	100	22	118	67	152	20	95	44	150

Very respectfully,

RICHARD N. CONNOLLY, M. D.,

Bacteriologist

REPORT OF THE
SEROLOGICAL LABORATORY
AT THE
CITY HOSPITAL

REPORT OF THE
Serological Laboratory
AT THE CITY HOSPITAL.

Mr. D. D. Chandler, Health Officer:

I herewith submit the report of the Serological Laboratory for the year 1914.

In May, 1913, the Board of Health decided to combine the facilities of the Bacteriological and Pathological Laboratories at the City Hospital in order to perform the Wassermann Reaction for the Serological Diagnosis of Syphilis.

The Serological Laboratory was organized to perform the Wassermann Reaction and to examine for the *Treponema Pallidum* (germ of syphilis) from patients residing in the City of Newark, free of charge.

The reactions are performed once a week at the laboratory. Physicians may collect the blood specimens personally, using the outfit supplied by the Department or they may send the patients direct to the laboratory for the collection of blood. Outfits for the collection of blood, with circular of information can be obtained at any of the culture stations established by the Department or at the laboratory.

During the year 1914 over 235 physicians in Newark have sent blood specimens or patients to the laboratory for examination. This does not include specimens received from institutions.

The following institutions have also used the laboratory for the performance of the Wassermann Reaction: City Hospital, City Dispensary, St. Michael's Hospital, St. James' Hospital, St. Barnabas' Hospital, German Hospital, Eye and Ear Infirmary, Beth Israel Hospital, Homeopathic Hospital, Home for Crippled Children, Women's and Children's Hospital, Pines' Hospital, Social Isolation Hospital, Florence Crittendon Home and Departments of Education, Child Hygiene, and Researcher's Office.

The following will give a short synopsis of the work of the laboratory for the year 1914:

Number of Wassermann Reactions performed	222
Number of Positive Reactions	76
Number of Negative Reactions	146

Numerous examinations for *treponema pallida* have been made from the initial sores, positive early diagnosis often made and the patient started under proper early treatment, and it is only early treatment that offers a hope of cure in this disease. By judicious argument many cases of active syphilis, especially in young adults 17 to 25 years of age, have been directed to physicians and institutions where they can receive proper treatment, be kept off street, and from mixing in society until they have passed their active communicable stage of syphilis.

The Wassermann Reaction is a complex test-tube reaction, which requires for its performance the skill and technique of trained laboratory men. It is therefore important that every large municipality should offer to its

population and its practicing physicians proper facilities for the performance of such diagnostic and therapeutic tests. The reliability of the Wassermann Reaction and other similar diagnostic reactions in cases at hand is directly proportionate with the skill and experience of the laboratory workers, and for obvious reasons such work should be under State or public control, so that correct and uniform results may be obtained.

The importance of the Wassermann Reaction can be best summarized in the following two statements:

(1) Repeated Wassermann Reactions are essential in the modern scientific diagnosis and treatment of syphilis.

(2). All subacute and chronic medical and surgical cases, both in their diagnosis and treatment, require a Wassermann test or tests to preclude the possibility of syphilitic infection, as about 10% of the population in large communities are syphilitic. We expect in the near future to examine the blood of every patient in the City Hospital who requires a stay longer than one week (in the same manner that a specimen of urine is examined), and by this procedure detect innumerable cases of latent syphilis, make more correct diagnoses, institute proper treatment and save community money by shortening time in hospital.

In the near future this laboratory hopes to have proper facilities and equipment to increase its work along the following lines:

(1). To perform the Wassermann Reaction at least three times a week.

(2). To perform Complement Fixation Tests for the diagnosis of subacute and chronic gonorrhoea and its complications.

(3). To perform Complement Fixation Tests for the early diagnosis of Pertussis Whooping cough, and Glanders.

(4). To perform Complement Fixation Tests for the diagnosis of active Tuberculosis.

(5). To extend the special work of this laboratory, so that it will become a more useful unit to the community of Newark.

H S MARTLAND

ANNUAL
REPORT OF THE CHEMIST

Newark Board of Health 1914

ANNUAL REPORT OF THE CHEMIST

To D. D. Chandler, Health Officer:

DEAR SIR. The year's laboratory work shows another considerable increase in the number of samples examined of all kinds, milk analyses leading as usual.

A study of the comparison table of milk data shows a marked improvement in the chemical quality of the milk over that of last year, which, in turn, was much better than that of the year before. The percentage of samples in the highest class is markedly higher, and that in the lowest (milk below the Legal Standard) is 3.50% of the total number, against 9.35% in 1913 and 16.14% in 1912.

This improvement in the supply is further shown by a higher general average for Total Solids and Fats for the year. These figures for the last two years are exceedingly gratifying, as for the fifteen preceding years there had been a steady decline in the quality of the milk.

In addition to the regular routine milk tests, there were 200 sediment tests for suspended dirt. These are made by filtering a pint of milk through a disc of absorbent cotton one inch in diameter, and noting the sediment collected. The discs are washed and dried and preserved as records. There was a marked improvement over the results of similar tests last year.

During the year we have been operating under a new and comprehensive Milk Ordinance. Many of the dealers have changed their methods to comply with its provisions in the matter of grading and pasteurizing the milk. With the present laboratory facilities, however, it will be impossible to properly control the grading and enforce the ordinance.

For the purpose of municipal milk control and the examination of Water, Food and Drugs, I would urge the advisability of the early establishment of a modern laboratory with the best equipment for Board of Health work.

Samples of the city water have been examined regularly every month, and the tabulated results appear among the tables. The water as distributed in the city mains has always been of good quality, but a few abnormalities have been found in a few instances in some of the watershed samples.

Twenty five examinations of miscellaneous articles were made and reported on. Among these were two samples of link sausage which contained nearly one per cent. of ordinary white sand, the origin of which was never explained.

The tabular results of milk and water analyses have been grouped and are appended hereto:

CLASSIFIED TABLE OF MILK ANALYSES

of Samples having a Percentage of Total Solids of 12.50 and
OVER

Average for Solids 12.94%. Average for Fat 3.95%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.5	3.7	12.74	3.80	13.13	4.00	12.8	3.7
12.80	3.90	12.76	3.8	13.32	3.60	13.12	4.10
12.75	4.00	12.81	3.8	12.70	3.7	12.5	3.70
12.80	4.0	12.9	4.00	12.81	3.	13.01	4.10
13.16	4.5	12.2	3.8	13.01	3.60	12.3	4.00
13.45	4.50	12.62	3.4	12.60	4.00	13.16	4.10
13.65	4.4	13.62	4.10	12.72	3.6	13.80	4.60
13.12	4.3	12.72	3.9	12.58	3.60	12.55	3.8
13.05	3.80	13.3	4.2	13.56	4.20	12.79	3.80
13.06	4.00	12.79	3.6	12.80	4.00	12.5	4.50
12.57	3.40	12.80	3.8	12.85	3.70	12.72	4.0
14.15	5.9	12.7	4.00	13.22	4.0	12.62	3.70
12.57	3.70	13.89	4.50	12.85	4.	13.45	4.10
12.55	3.7	12.85	3.80	12.71	3.10	13.85	4.90
12.79	3.60	12.85	3.70	12.95	4.10	12.63	3.70
13.62	3.40	12.97	3.70	12.82	3.80	12.85	3.70
12.99	4.00	12.60	3.60	12.60	3.80	12.55	3.80
13.05	3.80	13.17	3.90	12.65	3.70	12.82	3.80
13.65	4.20	12.99	4.0	13.62	4.40	12.70	4.00
13.31	4.2	12.71	3.7	12.76	4.00	12.80	3.60
12.89	4.10	13.45	3.90	12.75	4.0	12.52	3.60
13.74	4.50	12.75	4.00	12.81	3.60	13.42	4.10
12.65	3.80	12.72	3.90	12.79	3.90	12.57	3.60
12.80	3.90	12.62	3.8	13.0	4.10	12.56	3.90
12.70	3.70	12.66	3.60	12.72	3.6	13.29	4.00
12.60	3.00	13.19	4.50	12.85	3.70	12.70	4.10
12.85	3.8	13.15	4.0	12.97	4.30	13.07	4.00
12.80	3.90	12.71	3.70	12.65	3.60	13.44	4.40
13.45	3.90	13.32	4.10	12.70	4.00	13.7	4.60
12.60	3.60	13.50	4.50	12.59	3.60	13.62	4.40
13.22	4.00	12.75	4.00	12.70	4.00	12.71	3.70

CLASSIFIED TABLE OF MILK ANALYSES—Continued

Seepes having Percentage of Total Solids of 1.00 or over. Continued.

Average for Solids—12.94%.

Average for Fat

[illegible]

CLASSIFIED TABLE OF MILK ANALYSES Continued

600 Samples. Average Percentage of Total Solids of 1.50 and over—Continued

Average for Solids 12.94%. Average for Fat 3.95%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.2	1.0	12.59	3.60	12.7	4.00	12.72	3.9
12.2	1.0	12.59	3.60	12.76	4.00	12.80	4.0
12.3	3.00	12.7	3.7	13.00	4.10	13.0	4.00
12.3	3.00	12.70	3.6	12.80	4.1	13.2	4.10
12.36	4.00	12.82	4.0	13.20	4.10	13.4	4.3
12.4	3.80	12.72	3	13.18	3.90	12.9	3.80
12.5	4.00	13.0	4.8	12.80	4.00	13.5	4.0
3.00	4.0	13.55	3.70	12.70	3	12.82	3.80
12.60	4	12.7	3.00	12	3.60	12.80	4.0
12.8	4.00	13.12	4.0	13.11	4.00	13.7	4.0
12.8	3.80	12.65	3.0	12.7	3.4	12.62	4.00
12.7	4.1	12.7	4.00	12.7	3.0	13.0	3.80
12.70	3.50	12.7	3.80	12.6	3.90	12.92	4.00
12.8	3.70	12.82	3.80	13.21	4.70	12.71	3.70
12.10	4.2	12.0	4.00	12.7	3.8	12.55	4.30
12.80	3.8	12.67	3.7	13.7	4.3	12.96	3.80
12.92	4.20	13	4.0	12.7	3.70	12.60	3.40
12.9	4.0	13.5	3.7	13.22	4.20	13.20	4.0
12.9	4.0	12.62	4.0	12.8	3.80	13.0	4.0
13.00	4.3	13.07	3.80	12.0	3	11.25	4.80
12.9	4.00	12	3.7	12.62	4.0	13.12	4.80
14.1	4.0	12.7	4.2	13.60	3.80	12	3.80
12.80	4.0	12.60	4.0	12.71	3.7	11.5	4.0
12.02	4.0	13.0	4.00	12	3.7	12.50	3.60
13.0	4.20	12.8	3.0	12	3.7	12.40	3.90
12.15	3.80	12.77	3.80	12	3.70	12.4	4.0
12.22	4.00	12.60	3.8	12.68	3.80	12.8	3.90
12.80	3.80	13.22	4	13.2	4.0	13.5	4.00
13.02	4	13.55	4.00	12	4	12.00	3.8
13.3	4.0	12.8	3.80	12.7	4.0	12.3	4.00
12.70	4.00	13.0	4.20	13.02	4.0	12.52	3.80
13.14	4.00	12.60	3.80	12.7	4	13.0	4.0
13.0	4.0	13.4	4.20	13.0	4	13.00	4.20
13.07	4.0	13.0	4.0	13.00	4.0	13.10	4.0
13.81	3.50	13.32	4.80	12.8	4.00	13.50	4.0
12.8	3.8	13.0	4.3	12.7	4.2	13.4	4.00
12.62	4.00	12	3.80	12.7	3.8	12.8	3.80
12.90	4.0	12.7	3.8	13.4	4.0	13.4	4.00

CLASSIFIED TABLE OF MILK ANALYSES Continued

2. Samples having a Percentage of Total Solids of 12% and over Continued.

Average for Solids 12.94%. Average for Fat 3.95%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.54	3.50	12.9	3.5	12.58	4.20	12.2	3.00
12.56	4.00	12.82	3.8	12.11	4.00	12.51	3.00
12.8	3.80	13.07	4.0	12.70	4.40	12.22	3.8
12.61	4.20	12.57	4.0	12.14	4.00	12.8	3.2
13.82	4.40	13.19	4.10	12.52	3.60	13.10	3.80
12.00	4.00	12.9	3.50	12.49	4.00	12.2	3.5
11.2	3.00	12.75	3.80	12.82	4.10	12.94	3.6
12.40	3.70	12.90	4.10	12.60	4.00	12.48	3.7
12.60	4.00	12.81	4.20	13.57	4.50	12.80	4.00
12.60	4.00	12.2	4.00	12.22	4.00	12.62	4.10
12.4	3.80	12.53	4.00	12.98	3.80	12.47	4.00
12.5	3.80	12.52	3.50	12.48	3.60	12.40	4.50
12.12	3.80	12.50	4.00	12.80	4.00	12.22	4.20
12.70	4.00	12.8	3.80	12.52	3.60	12.60	4.00
13.20	4.20	12.38	4.00	13.45	4.20	12.67	4.00
12.82	4.00	12.98	3.80	12.65	3.90	12.60	4.00
12.72	4.20	12.72	4.10	12.65	3.90	12.72	3.90
14.57	5.80	12.95	4.10	12.92	4.30	13.07	4.00
12.60	4.00	12.52	3.80	12.84	4.80	12.92	4.00
12.61	3.50	12.65	3.65	12.52	3.80	13.14	4.60
12.65	3.80	12.50	4.00	12.60	4.00	12.50	4.00
13.71	4.40	12.47	3.80	12.47	4.30	12.42	3.6
12.50	3.70	12.90	3.80	12.40	3.70	13.45	4.20
12.80	3.90	12.92	4.20	13.00	4.20	12.50	4.00
13.10	4.00	13.20	4.20	12.70	3.80	12.65	4.10
12.10	4.10	12.80	3.90	13.05	4.20	12.42	3.90
12.4	4.10	12.82	4.10	12.50	4.00	13.70	4.80
12.76	3.70	13.65	4.60	12.60	4.00	13.35	4.30
12.88	3.80	12.60	4.00	12.62	4.10	12.60	3.90
12.2	4.00	12.50	3.80	12.60	3.60	12.60	4.00
12.90	4.00	12.2	3.50	12.60	4.00	12.60	3.80
12.52	3.60	12.60	4.00	12.22	4.00	13.14	4.00
12.08	4.00	12.60	4.00	12.80	3.90	12.82	4.00
12.40	4.00	12.70	3.40	12.40	5.00	12.60	4.00
12.52	3.80	12.50	3.80	12.70	3.80	12.40	3.80
12.90	3.80	12.68	3.80	13.70	4.30	12.60	3.80
12.60	4.00	12.61	3.80	12.42	3.60	13.14	4.00
12.68	4.20	12.60	3.60	12.60	3.80	13.00	4.00

CLASSIFIED TABLE OF MILK ANALYSES (Continued)

620 Samples having a Percentage of Total Solids of 12.50 and over—Continued

Average for Solids 12.94%. Average for Fat 3.95%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
11.29	3.60	12.79	3.77	12.64	3.50	12.92	4.00
12.58	3.40	13.34	4.00	12.85	3.70	12.52	3.20
13.01	3.90	12.52	3.80	12.83	4.00	12.77	3.60
11.50	3.70	12.76	4.00	12.72	3.60	11.12	3.00
12.74	3.80	13.06	3.80	12.85	3.60	12.82	4.00
11.37	3.00	13.04	4.00	13.29	4.00	12.88	3.10
13.53	4.20	12.52	3.60	13.29	4.00	12.53	3.80
13.73	1.80	13.48	4.40	12.55	3.60	12.51	4.20
12.95	3.90	12.84	4.00	13.49	4.70	12.83	4.00
13.14	4.00	12.85	3.60	12.69	3.50	13.32	4.00

CLASSIFIED TABLE OF MILK ANALYSES Continued.

485 Samples having a Percentage of Total Solids between 12.00 and 12.50.

Average for Solids—12.13%.

Average for Fat—3.46%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.18	3.3	12.1	3.40	12.39	3.50	12.28	3.40
12.17	3.3	12.02	3.50	12.35	3.60	12.13	3.10
12.1	3.3	12.08	3.30	12.49	4.00	12.19	3.40
12.08	3.3	12.22	3.30	12.15	3.30	12.16	3.30
12.08	3.3	12.02	3.50	12.42	3.60	12.00	3.30
12.08	3.3	12.05	3.60	12.11	3.20	12.59	3.6
12.08	3.3	12.1	3.80	12.12	3.20	12.39	3.50
12.0	3.3	12.11	3.50	12.18	3.20	12.45	3.20
12.0	3.3	12.05	3.40	12.25	3.70	12.12	3.10
12.0	3.3	12.01	3.60	12.23	3.50	12.21	3.00
12.0	3.3	12.0	3.50	12.00	3.40	12.35	3.60
12.0	3.3	12.0	3.20	12.02	3.20	12.12	3.40
12.0	3.3	12.0	3.40	12.01	3.30	12.15	3.30
12.0	3.3	12.0	3.60	12.14	3.10	12.35	3.60
12.12	3.3	12.0	3.30	12.24	3.50	12.19	3.40
12.12	3.3	12.19	3.40	12.22	3.50	12.35	3.70
12.0	3.3	12.24	3.50	12.46	3.70	12.16	3.50
12.0	3.3	12.09	3.50	12.10	3.00	12.24	3.50
12.0	3.3	12.48	4.00	12.32	3.80	12.20	3.40
12.0	3.3	12.0	3.4	12.14	3.30	12.30	3.30
12.0	3.3	12.1	3.40	12.05	3.40	12.05	3.40
12.0	3.3	12.08	3.3	12.00	3.00	12.20	3.60
12.0	3.3	12.05	3.3	12.25	3.50	12.31	3.50
12.0	3.3	12.0	3.50	12.12	3.40	12.05	3.10
12.0	3.3	12.0	3.40	12.18	3.80	12.22	3.30
12.0	3.3	12.0	3.50	12.01	3.50	12.20	3.50
12.0	3.3	12.0	3.40	12.00	3.70	12.30	3.30
12.1	3.3	12.18	3.3	12.05	3.40	12.10	3.20
12.0	3.3	12.02	3.3	12.05	3.3	12.25	3.30
12.0	3.3	12.05	3.3	12.05	3.3	12.30	3.50
12.0	3.3	12.10	3.3	12.0	3.3	12.02	3.50
12.21	3.3	12.01	3.40	12.09	3.40	12.10	3.40
12.1	3.3	12.02	3.3	12.0	3.3	12.27	3.30

CLASSIFIED TABLE OF MILK ANALYSES—Continued.

485 Samples having a Percentage of Total Solids between 12.00 and 12.50—Continued.

Average for Solids—12.13%.

Average for Fat—3.46%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.3	.8	12.02	.54	12.2	.72	12.40	.8
12.4	1.1	12.02	.57	12.20	.60	12.42	.4
12.20	.33	12.09	.60	12.3	.60	12.45	.32
12.15	.38	12.15	.50	12.17	.330	12.46	.370
12.42	.60	12.1	.54	12.2	.2	12.5	.60
12.29	.720	12.20	.32	12.21	.6	12.48	.50
12.01	.30	12.20	.70	12.25	.90	12.25	.80
12.21	.6	12.2	.30	12.26	.40	12.20	.62
12.15	.34	12.2	.380	12.3	.30	12.15	.38
12.12	.31	12.3	.30	12.3	.33	12.31	.35
12.25	.40	12.24	.30	12.8	.38	12.8	.70
12.10	.40	12.32	.5	12.4	.38	12.4	.60
12.12	.70	12.5	.30	12.48	.32	12.49	.40
12.28	.6	12.40	.30	12.00	.	12.9	.60
12.8	.34	12.0	.5	12.43	.40	12.5	.40
12.5	.38	12.33	.60	12.44	.60	12.42	.40
12.28	.30	12.1	.30	12.07	.30	12.05	.34
12.13	.320	12.28	.40	12.37	.80	12.37	.32
12.06	.40	12.5	.42	12.4	.4	12.11	.32
12.2	.40	12.12	.40	12.4	.36	12.42	.60
12.1	.30	12.15	.38	12.2	.30	12.5	.340
12.05	.20	12.15	.60	12.0	.	12.12	.40
12.20	.60	12.00	.5	12.40	.60	12.05	.34
12.18	.42	12.08	.60	12.42	.30	12.4	.35
12.06	.34	12.3	.80	12.25	.60	12.06	.330
12.0	.30	12.08	.30	12.30	.4	12.12	.340
12.3	.340	12.06	.60	12.1	.60	12.1	.80
12.1	.370	12.0	.34	12.07	.34	12.22	.60
12.15	.60	12.4	.62	12.0	.32	12.28	.34
12.35	.34	12.3	.4	12.0	.30	12.20	.34
12.18	.36	12.22	.3	12.0	.30	12.20	.340
12.20	.34	12.0	.35	12.2	.80	12.05	.34
12.19	.340	12.48	.70	12.0	.30	12.05	.340
12.28	.360	12.09	.50	12.22	.40	12.15	.345
12.00	.340	12.1	.6	12.3	.60	12.27	.30
12.3	.340	12.25	.34	12.3	.60	12.28	.40
12.28	.340	12.15	.360	12.3	.320	12.46	.70
12.00	.340	12.11	.62	12.2	.34	12.22	.30

CLASSIFIED TABLE OF MILK ANALYSES Continued
 485 Samples Having a Percentage of Total Solids between
 12.00 and 12.50 Continued

Average for Solids 12.15%

Average for Fat 3.6%

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.20	3.60	12.00	3.40	12.18	3.20	12.10	3.60
12.28	3.70	12.13	3.60	12.16	3.60	12.28	3.60
12.10	3.70	12.10	3.50	12.28	3.30	12.32	3.80
12.00	3.70	12.18	3.80	12.08	3.80	12.38	3.80
12.21	3.60	12.25	3.60	12.13	3.60	12.20	3.40
12.02	3.60	12.17	3.80	12.25	3.50	12.20	3.60
12.10	3.50	12.25	3.60	12.20	3.60	12.20	3.60
12.18	3.30	12.25	3.60	12.12	3.40	12.15	3.70
12.21	3.40	12.15	3.80	12.16	3.40	12.14	3.70
12.00	3.40	12.12	3.60	12.14	3.70	12.21	3.70
12.18	3.70	12.10	3.70	12.19	4.10	12.28	3.80
12.10	3.60	12.38	3.20	12.22	3.60	12.10	3.70
12.10	3.60	12.30	3.50	12.15	3.90	12.22	3.60
12.21	3.50	12.21	3.60	12.22	3.60	12.12	3.40
12.12	3.80	12.12	3.40	12.10	3.30	12.14	3.60
12.17	3.60	12.18	3.40	12.02	3.20	12.05	3.40
12.18	3.20	12.12	3.10	12.10	3.70	12.10	3.40
12.10	3.60	12.09	3.60	12.10	3.70	12.12	3.70
12.12	3.40	12.10	3.60	12.15	3.60	12.01	3.60
12.10	3.60	12.25	3.20	12.32	3.70	12.32	3.60
12.11	3.40	12.12	3.80	12.35	3.60	12.29	2.60
12.14	3.60	12.10	3.70	12.10	3.50	12.22	3.50
12.10	3.60	12.15	3.70	12.17	3.80	12.30	3.70
12.10	3.60	12.02	3.50	12.21	3.50	12.09	3.30
12.38	3.60	12.15	3.70	12.10	3.20	12.11	4.00
12.20	3.60	12.03	3.20	12.12	3.20	12.15	3.70
12.12	3.80	12.31	3.20	12.30	3.40	12.21	3.50
12.15	3.50	12.25	3.20	12.28	3.40	12.10	3.60
12.18	3.40	12.10	3.60	12.17	3.30	12.12	3.40
12.22	3.60	12.15	3.80	12.05	3.40	12.11	3.70
12.05	3.60	12.30	2.60	12.11	3.80	12.19	3.40
12.10	3.50	12.12	3.60	12.10	3.30	12.09	3.60
12.10	3.60	12.10	3.20	12.16	3.50	12.12	3.40
12.22	3.60	12.21	3.60	12.12	3.80	12.11	2.60
12.10	3.80	12.16	3.60	12.18	3.80	12.35	3.60
12.10	3.60	12.10	3.60	12.00	3.40	12.10	3.40
12.05	3.60	12.14	3.70	12.12	3.80	12.17	4.20
12.15	3.40	12.28	3.40	12.10	3.20	12.04	3.40

CLASSIFIED TABLE OF MILK ANALYSES Continued.

485 Samples having a Percentage of Total Solids between
12.00 and 12.50 Continued.

Average for Solids—12.14%.

Average for Fat—3.46%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
12.25	3.70	12.05	3.40	12.35	3.40	12.49	4.00
12.12	3.60	12.00	3.10	12.35	3.60	12.35	3.60
12.12	3.30	12.08	3.60	12.42	3.70	12.12	3.40
12.25	3.70	12.20	3.40	12.22	3.30	12.12	3.20
12.16	3.50	12.28	3.60	12.45	3.90	12.05	3.40
12.15	3.20	12.15	3.65	12.35	3.60	12.22	3.60
12.12	3.40	12.36	3.40	12.29	3.60	12.35	3.40
12.22	3.60	12.32	3.50	12.16	3.50	12.15	3.60
12.04	3.60	12.08	3.30	12.35	3.50	12.29	3.60
12.32	3.70	12.01	3.30	12.25	3.20	12.09	3.60
12.11	3.60	12.18	3.20	12.42	3.40	12.43	4.00
12.20	3.60						

CLASSIFIED TABLE OF MILK ANALYSES. Continued

270 Samples having a Percentage of Total Solids between 11.50 and 12.00

Average for Solids—11.76%

Average for Fat—3.23%

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
11.82	3.3	11.89	3.26	11.89	3.3	11.92	3.3
11.88	3.39	11.92	3.1	11.95	3.29	11.95	3.3
11.9	3.36	11.95	3.2	11.85	3.36	11.95	3.2
11.9	3.39	11.86	3.2	11.71	3.46	11.96	3.46
11.88	2.9	11.79	2.9	11.77	3.36	11.9	3.69
11.8	3.36	11.85	3.3	11.75	3.2	11.98	3.4
11.9	3.3	11.65	3.9	11.95	3.2	11.9	3.36
11.95	3.29	11.71	3.3	11.75	3.36	11.92	3.29
11.92	3.3	11.75	3.15	11.88	3.3	11.81	3.39
11.95	3.3	11.75	3.2	11.8	3.39	11.89	3.39
11.78	3.3	11.88	3.26	11.96	3.3	11.96	3.39
11.85	3.19	11.76	3.36	11.84	3.3	11.9	3.39
11.96	3.39	11.9	3.3	11.9	3.36	11.76	3.39
11.9	3.3	11.9	3.3	11.85	3.1	11.79	3.36
11.95	2.86	11.71	3.3	11.9	2.89	11.96	3.39
11.95	3.3	11.85	3.16	11.9	3.36	11.98	3.39
11.9	2.9	11.8	2.89	11.65	3.29	11.92	3.39
11.9	3.3	11.75	3.3	11.79	3.29	11.72	3.36
11.85	3.3	11.9	3.39	11.85	3.36	11.75	3.29
11.95	3.3	11.9	3.39	11.86	3.36	11.72	3.39
11.95	3.3	11.8	3.3	11.85	3.36	11.8	3.39
11.9	3.3	11.96	3.39	11.9	3.3	11.7	3.29
11.9	3.3	11.95	3.3	11.95	3.36	11.9	3.36
11.95	3.3	11.95	3.3	11.78	3.3	11.9	2.99
11.95	2.86	11.79	3.3	11.9	3.26	11.75	3.3
11.95	3.36	11.89	3.3	11.72	3.3	11.85	3.39
11.95	3.36	11.8	3.39	11.72	3.39	11.79	3.39
11.95	3.3	11.89	3.3	11.96	3.3	11.85	3.39
11.95	3.36	11.8	3.29	11.69	3.3	11.75	3.3
11.95	3.36	11.89	3.3	11.96	2.89	11.79	3.36
11.95	3.36	11.75	3.2	11.85	3.36	11.85	3.36
11.95	3.3	11.75	2.3	11.65	3.39	11.92	3.19
11.95	3.36	11.75	3.3	11.78	3.36	11.92	3.19

CLASSIFIED TABLE OF MILK ANALYSES Continued.

270 Samples having a Percentage of Total Solids between 11.50 and 12.00 Continued

Average for Solids 11.76%.

Average for Fat 5.25%

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
11.97	3.50	11.8	3.2	11.61	3.2	11.9	5.4
11.88	3.20	11.68	3.40	11.99	3.10	11.88	3.2
11.65	2.20	11.78	3.30	11.82	3.10	11.85	3.50
11.90	3.4	11.8	3.40	11.81	3.20	11.72	3.90
11.8	2.80	11.81	3.20	11.8	3.4	11.89	1.50
11.99	3.3	11.84	3.10	11.90	3.40	11.65	3.2
11.77	3.40	11.89	3.3	11.9	40	11.70	3.1
11.69	3.10	11.72	3.3	11.85	3.40	11.62	3.10
11.90	3.10	11.9	3.40	11.70	3.00	11.8	2.20
11.89	3.4	11.6	3.10	11.61	3.00	11.80	3.9
11.9	3.2	11.69	3.10	11.64	3.30	11.60	3.10
11.80	3.10	11.86	3.2	11.90	3.10	11.90	3.1
11.72	3.20	11.72	3.30	11.95	3.2	11.95	3.80
11.90	3.30	11.85	3.30	11.90	3.40	11.9	2.40
11.8	2.90	11.80	3.20	11.80	3.10	11.9	3.4
11.93	3.30	11.9	3.40	11.7	3.10	11.90	3.10
11.95	3.20	11.59	3.3	11.8	3.40	11.90	3.00
11.71	3.30	11.82	3.5	11.65	3.2	11.80	3.40
11.55	3.10	11.80	3.40	11.80	3.2	11.9	3.30
11.60	3.00	11.80	2.80	11.95	3.20	11.70	3.40
11.89	3.20	11.91	3.10	11.78	3.40	11.60	3.10
11.90	3.20	11.85	3.2	11.82	3.30	11.85	3.40
11.72	3.00	11.60	2.35	11.98	3.40	11.69	3.40
11.72	3.40	11.63	3.00	11.25	3.2	11.72	3.00
11.7	3.10	11.89	3.40	11.85	3.3	11.88	3.20
11.80	3.00	11.98	3.50	11.65	3.20	11.88	3.20
11.95	3.20	11.75	3.10	11.61	3.00	11.90	3.70
11.92	3.10	11.92	3.40	11.80	3.30	11.88	3.20
11.78	3.40	11.75	3.20	11.81	3.20	11.58	3.30
11.92	3.30	11.85	3.40	11.95	3.20	11.80	2.8
11.85	3.00	11.77	3.30	11.70	3.40	11.70	3.40
11.72	3.30	11.93	3	11.59	3.30	11.77	3.10
11.89	3.20	11.70	3.10	11.92	3.10	11.72	3.30
11.58	3.50	11.92	3.40	11.78	3.40	11.6	3.5
11.65	3.10						

CLASSIFIED TABLE OF MILK ANALYSIS. (Continued.)
 3. Samples having a Percentage of Total Solids below 11%.
 Average for Solids—11.05%. Average for Fat—2.90%.

Solids	Fat	Solids	Fat	Solids	Fat	Solids	Fat
10.84	2.90	10.94	2.6	10.27	1.56	11.18	2.80
11.06	2.70	10.06	2.30	10.85	2.70	10.52	2.60
11.44	2.80	10.70	1.00	10.72	2.65	11.33	2.80
10.68	2.40	10.98	2.80	10.52	3.00	10.98	2.80
11.32	2.80	10.65	3.00	11.53	3.00	11.62	2.90
11.13	3.30	11.11	2.40	11.22	2.90	11.47	3.00
11.15	2.90	11.32	3.30	11.20	3.00	11.60	3.00
10.24	2.90	11.02	2.80	11.19	3.30	11.63	3.00
11.12	2.80	11.16	2.90	10.30	3.30	11.60	3.10
10.72	3.40	11.16	3.60	11.20	4.00	11.38	3.20
10.42	2.40	11.36	3.20	10.82	3.20	11.48	3.10
11.30	3.70	11.48	3.50	10.72	2.50	11.41	2.80
11.20	2.60	11.42	3.50				

COMPARISON TABLE

Year	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	
Number of samples analyzed	136	178	221	283	793	310	463	82	443	443	418	531	365	88	84	824	1305	1425	
Total Solids of 12.50 and over.																			
Percentage of samples	69.12	70.23	72.40	63.37	68.82	68.18	62.80	54.55	49.90	61.81	62.65	46.62	36.16	34.95	33.53	33.20	30.60	43.51	
1st class Average % of total solids	13.24	13.24	13.06	13.24	13.16	13.18	12.91	13.07	13.14	13.14	13.21	13.09	13.24	13.04	12.79	12.91	12.88	12.94	
Average % of fat			3.95	4.05	4.07	4.16	3.88	4.00	4.10	4.06	4.22	4.08	4.13	4.06	3.71	4.02	3.99	3.95	
Total Solids between 12.00 and 12.50.																			
Percentage of samples	21.32	14.16	13.38	21.55	22.87	28.11	19.27	29.66	40.31	39.67	29.06	32.88	31.64	38.73	31.47	31.78	31.44		
2d class Average % of total solids	12.23	12.35	12.27	12.25	12.21	12.11	12.19	12.12	12.24	12.25	12.22	12.24	12.23	12.25	12.24	12.24	12.13		
Average % of fat			3.60	3.66	3.52	3.50	3.60	3.49	3.45	3.56	3.46	3.53	3.55	3.35	3.50	3.48	3.46		
Total Solids below 12.00.																			
Percentage of samples	19.56	16.73	12.32	13.07	13.31	3.94	15.01	17.89	20.44	22.85	17.70	24.48	30.96	34.41	38.29	42.00	34.57	22.45	
3d class Average % of total solids	11.61	11.58	11.48	11.65	8.11	11.44	11.33	11.98	11.47	11.71	11.61	11.61	11.61	11.47	11.41	11.41	11.41		
Average % of fat			3.11	3.25	3.06	3.13	3.18	3.10	3.04	3.14	3.06	3.06	3.11	3.02	3.00	3.00	3.00		
Total Solids below 11.50.																			
Included Percentage of samples																14.75	16.14	9.35	3.50
in Average % of total solids																10.36	10.66	11.41	0.10
3d class Average % of fat																2.82	2.87	2.90	2.90
General average % of total solids	12.87	12.83	12.75	11.77	12.70	12.64	12.60	12.52	12.51	12.53	12.64	12.42	12.67	12.30	12.06	12.61	12.61	12.61	
General average % of fat			3.60	3.85	3.75	3.81	3.68	3.75	3.61	3.71	3.83	3.69	3.62	3.58	3.31	3.61	3.51	3.61	

ANALYSES OF NEWARK AQUEDUCT WATER.

Samples from Oak Ridge Stream, before junction with Clinton

PARTS PER MILLION.

Stream at New Foundland.

1914	Tempera- ture, Fahr.	Sur- face Feet	Color	NITROGEN AS				Chlo- ride	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Solids
				Free Ammonia	Albuminoid Ammonia	Ni- trates	Ni- trates					
Feb. 6	34	0.5	25	0.28	0.14	0	.08	1.0	28	54	2	54
Mar. 25	35	0.5	30	0.28	0.05	0	1.0	1.0	28	61	15	42
Apr. 9	38	2.0	0	0.28	0.04	0	1.3	2.0	30	61	24	0
May 8	55	1.0	30	.004	.16	0	1.0	2.0	24	50	26	24
Jun. 10	59	0.5	30	0.00	1.02	0	1.0	2.0	31	49	14	32
July 22	65	1.0	25	0.08	0.04	0	0.5	1.0	25	54	17	37
Aug. 12	61	1.0	30	0.12	1.04	8	1.0	2.0	35	64	20	35
Sept. 15	58	2.0	30	0.08	1.06	0	1.0	2.0	35	54	14	34
Oct. 1	54	0.5	0	0.18	0.04	0	1.7	2.0	13	69	21	48
Nov. 14	40	1.0	60	0.22	0.04	0	0.9	2.0	24	45	21	24
Dec. 23	32	0.5	0	0.0	1.04	0	1.0	3.0	23	60	23	37

* Trace

ANALYSES OF NEWARK AQUEDUCT WATER

Samples from Clinton Stream, before junction with Oak Ridge Stream at New Foundland

PARTS PER MILLION.

Date	Temperature, Fahr	Tur- bidity	Color	NITROGEN AS				Chlorine	Temporary Hardness Alkalinity	Total Solids	Loss on Ignition	Fixed Solids
				Free Ammonia	Ammoniacal Nitrate	Nitrite	Nitrogen					
Feb. 6	34	6.5	20	.34	.86	0	.05	2.0	13	30	13	1.
Mar. 25	34	0.5	20	.012	.056	0	.08	2.0	12	58	16	2.
Apr. 19												
May 8	57	5	20	.014	.08		.05	2.0	14	41	21	2
Jun. 1	60	0.5	15	.018	.081	0	.08	2.0	12	14	18	26
July 22	63	1.0	15	.026	.070		.05	4.5	20	45	15	30
Aug. 12	69	0.5	10	.012	.088	*	.11	2.0	25	43	18	25
Sept. 15	42	0.5	10	.020	.066	0	.06	2.0	30	47	17	30
Oct. 22	54	0.5	20	.018	.090	0	.14	2.0	43	69	21	48
Nov. 19	38	10.0	20	.034	.270	0	.15	3.0	40	128	32	96
Dec. 23	32	0.5	20	.018	.082	0	.08	3.0	26	56	13	43

* Trace

ANALYSES OF NEWARK AQUEDUCT WATER
Samples from Echo Lake Stream, above Pequannock River
PARTS PER MILLION.

Date	Temperature, Fahr.	Turbidity	Color	NITROGEN AS				Chlorine	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Solids
				Free	Albumenoid	Nitrites	Nitrates					
				Ammonia	Ammonia	trites	trates					
Feb. 6	35	0.5	35	.028	.101	0	.09	2.0	16	51	23	28
Mar 25	35	0.5	35	.024	.091	0	.10	2.0	17	66	25	41
April 9	37	2.0	50	.028	.114	0	.08	2.0	15	46	27	19
May 8	56	5.5	40	.032	.114	0	.11	2.0	20	37	16	21
June 10	61	0.5	40	.018	.098	0	.11	2.0	27	60	28	32
July 22	64	0.5	50	.015	.100	0	.08	1.5	17	57	20	37
Aug 19	70	0.5	35	.022	.104	0	.20	2.0	22	65	21	44
Sept 15	48	0.5	15	.024	.082	0	.06	2.0	30	53	19	34
Oct 12	55	0.5	30	.016	.084	0	.06	2.0	31	61	21	40
Nov. 19	34	1.0	25	.024	.100	0	.07	3.0	20	56	17	33
Dec 23	31	0.5	15	.064	.092	0	.08	3.0	13	46	21	25

ANALYSES OF NEWARK AQUEDUCT WATER.

Samples from Macopin Intake, at Gatehouse.

PARTS PER MILLION

Date	Temp. F.	Turbidity	Total Solids	NITROGEN AS				Chlorine	Evaporatory Residue	Total Solids	Loss on Ignition	Fixed Solids
				Free Ammonia	Ammonia	Nitrate	Nitrite					
Feb. 6	6	35	.028	.052	0	.08	0	2.0	19	51	20	31
Mar. 25	35	30	.020	.094	0	.08	0	2.0	19	57	20	37
Apr. 9	49	35	.050	0	0	1.0	0	2.0	15	41	17	24
May 8	55	35	.032	.00	0	.10	0	2.0	23	42	19	23
June 16	65	25	.022	.084	0	.08	0	2.0	28	47	20	27
July 22	69	30	.011	.065	0	.1	0	1.5	27	55	18	37
Aug. 12	74	25	.024	.100	0	.10	0	2.0	34	66	31	35
Sept. 15	66	25	.014	.022	0	.06	0	2.0	38	62	27	35
Oct. 22	57	30	.014	.088	0	0	0	2.0	30	45	0	45
Nov. 19	39	30	.022	.126	0	1.0	0	0	23	55	9	46
Dec. 23	34	35	.028	.098	0	.03	0	0	20	58	14	44

ANALYSES OF NEWARK AQUEDUCT WATER
 Samples from Cedar Grove Reservoir, at Inlet Gatehouse
 PARTS PER MILLION.

1914	Temperature, Fahr	Tur- bidity	Color	NITROGEN AS				Chlo- rine	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Solids
				Free AMMONIA	Albuminoid AMMONIA	Ni- trates	Ni- trates					
Feb 6	35	0.5	30	.024	.034	0	.08	2.0	16	51	21	30
Mar 25	35	0.5	30	.018	.086	0	.08	2.0	19	49	16	33
April 9	40	1.0	25	.040	.104	0	.13	2.0	21	47	17	30
May 8	58	0.5	35	.028	.092	0	.10	2.0	20	47	18	29
June 10	69	0.5	25	.026	.096	0	.08	2.0	27	44	14	30
July 22	72	0.5	30	.010	.065	0	.04	1.5	26	58	20	38
Aug. 12	76	0.5	20	.024	.102	0	.10	2.0	31	51	20	31
Sept 15	60	0.5	30	.016	.096	0	.10	2.0	30	60	23	37
Oct. 22	54	0.5	20	.026	.086	0	.08	2.0	18	44	16	28
Nov 19	40	1.0	40	.022	.130	0	.20	3.0	24	78	35	43
Dec. 23	35	0.5	30	.024	.092	0	.08	2.0	21	58	17	41

ANALYSIS OF NEWARK AQUEDUCT WATER.
 Samples from Cedar Grove Reservoir, at Outlet Gatehouse.
 PARTS PER MILLION.

1914	Tempera- ture, Fahrenheit	Total Acidity	Color	NITROGEN AS				Total Solids	Temporary Hardness (Alkalinity)	Loss by Ignition	Fixed Solids
				Free Ammonia	Albuminoid Ammonia	Ni- trites	Ni- trates				
Feb. 6	35	0.7	25	.022	.100	0	.08	2.0	17	52	28
Mar. 25	34	0.7	26	.018	.080	0	.08	2.0	19	45	34
Apr. 19	40	0.5	25	.030	.100	0	.13	2.0	20	50	37
May 8	51	0.5	20	.030	.092	0	.10	2.0	20	49	27
June 10	67	0.7	25	.026	.086	0	.08	2.0	28	45	30
July 22	75	0.5	25	.010	.070	0	.05	1.5	25	56	36
Aug. 12	71	0.5	25	.020	.104	0	.1	2.0	30	50	31
Sept. 15	61	0.5	25	.020	.085	0	.08	2.0	31	50	34
Oct. 22	60	0.5	20	.018	.088	0	.08	2.0	18	37	24
Nov. 19	42	1.0	25	.021	.126	0	.04	2.0	22	50	31
Dec. 23	31	0.5	30	.021	.092	0	.08	2.0	20	60	43

ANALYSES OF NEWARK AQUEDUCT WATER
Samples from Belleville Reservoir, at Inlet Gatchhouse
PARTS PER MILLION.

1914	Tempera- ture, Fahr	Tur- bidity	Color	NITROGEN AS				Chlo- rine	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Solids
				Free	Albuminoid	Ni-	Ni-					
				Ammonia	Ammonia	trates	trates					
Feb 6	36	0.5	25	.018	.092	0	.08	2.0	18	54	21	33
Mar. 25	38	0.5	25	.020	.080	0	.08	2.0	20	45	15	30
April 9	43	2.0	35	.030	.100	0	.10	2.0	17	43	15	28
May 8	53	0.5	20	.024	.096	0	.10	2.0	20	49	17	32
June 10	67	0.5	25	.024	.100	0	.10	2.0	26	50	18	32
July 22	71	0.5	25	.011	.070	0	.05	1.5	24	53	19	34
Aug 31	73	0.5	25	.028	.098	0	.10	2.0	31	63	23	40
Sept 15	66	0.5	25	.020	.096	0	.08	2.0	32	53	20	33
Oct 22	60	0.5	20	.018	.098	0	.08	2.0	19	35	14	21
Nov. 19	43	1.0	25	.024	.116	0	.06	2.0	21	46	14	32
Dec. 23	36	0.5	30	.028	.094	0	.08	2.0	21	60	18	42

ANALYSES OF NEWARK AQUEDUCT WATER
 Samples from Laboratory Faucet, 927 Broad Street
 PARTS PER MILLION.

Date	Temperature	pH	Color	NITROGEN AS				Chlorine	Temporary Hardness (Alkalinity,	Total Solids	Loss on Ignition	Fixed Solids
				Free Ammonia	Albuminoid Ammonia	Nitrites	Nitrates					
Jan 10	39	6.5	35	.030	.114	0	.13	2.0	22	46	21	25
Feb 6	39	6.5	30	.026	.094	0	.08	2.0	18	52	17	31
Mar 2	38	6.5	25	.026	.088	0	.08	2.0	20	50	15	31
Apr 15	44	1.5	35	.040	.104	0	.10	2.0	19	50	22	28
May 8	54	6.5	25	.026	.100	0	.10	2.0	20	48	15	29
June 10	66	6.5	25	.024	.100	0	.10	2.0	25	48	21	27
July 22	73	6.5	25	.020	.070	0	.07	1.5	21	55	19	36
Aug 12	72	6.5	25	.028	.094	0	.08	2.0	32	60	21	36
Sept 15	67	6.5	25	.014	.096	0	.08	2.0	34	54	25	29
Oct 22	61	6.5	20	.018	.096	0	.08	2.0	19	39	12	27
Nov 10	47	1.0	25	.024	.105	0	.09	2.0	21	46	16	30
Dec 23	59	6.5	30	.020	.098	0	.08	3.0	21	59	20	39

ANALYSES OF NEWARK AQUEDUCT WATER.
Averages of Monthly Examinations.
PARTS PER MILLION

SOURCE OF SAMPLE	Tempera- ture Fahr	Tur- bidity	Color	NITROGEN AS					Chlo- rine	Temp. vary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Solids
				Free Ammonia	Albumenoid Ammonia	Ni- trates	Ni- trates						
Oak Ridge Stream	47.3	0.85	31.80	0.256	0.117	0	0.1040	2.13	28.65		46.45	21.27	55.18
Canton Stream	44.1	1.35	15.15	0.250	0.890	*	0.809	1.95	21.71		49.45	1.00	50.45
Kanouse Brook	49.3	1.15	38.00	0.213	1.15	0	0.710	2.05	22.80		51.40	2.39	53.79
Echo Lake Stream	47.9	0.68	33.65	0.08	0.039	0	0.090	2.13	20.40		53.81	21.63	75.44
Macopin Intake	51.2	0.72	31.0	0.241	0.944	0	0.8	2.13	24.06		52.90	2.27	55.17
Cedar Grove Intake	52.5	0.59	26.81	0.234	0.948	0	0.871	2.04	23.00		53.36	1.72	55.08
Cedar Grove Outlet	52.8	0.55	24.69	0.220	0.936	0	0.808	1.95	23.90		49.45	1.78	51.23
Belleville Reservoir	53.5	0.68	25.15	0.222	0.945	0	0.827	1.95	22.63		50.69	1.63	52.32
Laboratory faucet	53.2	0.2	27.00	0.15	0.906	0	0.40	2.4	23.00		50.08	19.92	69.99

* Trace.

Table of Maximum, Minimum and Average Total Solids
in the water from the Laboratory Faucet from 1900 to date

TOTAL SOLIDS Grains per U. S. Gallon

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	32
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Bureau of Contagious Diseases

NEWARK BOARD OF HEALTH

FOR THE YEAR 1914

EDWARD E. WORL M. D.

ANNUAL REPORT
OF THE
Bureau of Contagious Diseases
FOR THE YEAR 1914

To D. D. Chandler, Health Officer:

DEAR SIR I have the honor to present the following report of the Bureau of Contagious Diseases for the year 1914:

OUR POPULATION.

Our estimated population is placed at 395,000. The last U. S. Census, 1910, gives us the figures 347,469

THE DEATH RATE.

The death rate for 1914 is fixed at 14.76 per thousand. It includes, according to law, 150 deaths occurring in Soho Hospital.

The city death rate, excluding the hospital mortality, is fixed at 14.3 per thousand. The following table compares these rates, beginning with 1894:

YEAR	POPULATION	NO. OF DEATHS	DEATH RATE.
1894	200,000	4,543	22.72
1895	210,720	4,615	21.90
1896	220,000	4,716	21.43
1897	230,000	4,010	17.43
1898	240,000	4,303	18.30
1899	240,000	3,527	14.69
1900	246,079	5,006	20.34
1901	250,000	4,800	19.20
1902	255,000	4,443	17.42
1903	260,000	4,923	18.93
1904	272,000	5,478	20.14
1905	283,289	5,025	17.74
1906	290,000	5,551	19.14
1907	300,000	4,721	15.74
1908	305,000	5,000	16.39
1909	311,000	5,129	16.49
1910	347,469	5,784	16.64
1911	352,000	5,447	15.48
1912	370,000	5,424	14.66
1913	380,000	5,542	14.61
1914	395,000	5,806	14.70

SCARLET FEVER.

During 1914 we had reported 1,696 cases and 27 deaths. Comparing with the previous years we have:

YEAR.	CASES	DEATHS
1894.....	1,145	9
1895.....	623	5
1896.....	537	1.
1897..	1,358	54
1898.....	478	17
1899.....	607	34
1900.....	708	55
1901.....	643	22
1902.....	557	46
1903.....	779	71
1904.....	1,649	129
1905.....	1,309	15
1906.....	616	24
1907.....	773	41
1908.....	1,501	89
1909.....	1,786	79
1910.....	1,664	79
1911.....	1,927	21
1912.....	698	11
1913.....	1,036	27
1914.....	1,696	27
	—	—
	21,189	91.

Average mortality for 21 years, 4 4/10%

REPORTED SCARLET FEVER CASES AND DEATHS BY MONTHS

MONTHS.	CASES.	DEATHS	
		DEATHS.	IN SOHO
January	243	6	2
February	240	2	7
March	282	5	4
April	233	2	2
May	206	4	2
June	160	1	3
July	76	3	2
August	38	1	
September	36	..	.
October	50	1	1
November	61	1	
December	71	1	1
Total	1,696	27	+ 24

The mortality rate was 15%.

According to Chapter 154, Laws 1911, the six deaths occurring at Soho Hospital must be added to the rate

TYPHOID FEVER

During 1914 we had reported 250 cases and 26 deaths, a mortality of 10.4%. Comparing with previous years we have.

YEAR	CASES.	DEATHS.
1891	89	34
1892	149	50
1893	106	47
1894	103	33
1895	179	41
1896	515	60
1900	320	50
1901	316	57
1902	259	47

1903		606	63
1904		210	40
1905	. . . . .	228	40
1906		336	50
1907		330	69
1908		181	35
1909	..	210	32
1910		178	44
1911	...	208	37
1912		193	29
1913	. . . . .	217	30
1914		274	26

Total	.	4 875	918

The average mortality for 21 years is 10.8%

The deaths from Typhoid Fever are 6.3 to 100,000 of the population

REPORTED TYPHOID FEVER CASES AND DEATHS BY MONTHS.

MONTH	CASES	DEATHS.
January	9	2
February	3	1
March	4	
April	15	2
May	11	6
June	16	3
July	100	
August	27	3
September	21	3
October	23	1
November	6	3
December	19	2
	-	
Total	276	26

INFANTILE PARALYSIS.

Infantile Paralysis was reported at the following dates to the Board of Health, August 3, 1912. During year 1914 there were reported:

MONTH	CASES	DEATHS
January		1
March	1	
April		
October		
November		
December		
Total	1	1
Grand Total	1	1
1914	1	1
1913	1	1
1912	1	1
1911	1	1
1910	1	1
1909	1	1
1908	1	1
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1618	1	1
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1616	1	1
1615	1	1
1614	1	1
1613	1	1
1612	1	1
1611	1	1
1610	1	1
1609	1	1
1608		

1904	1,671	150
1905	1,611	119
1906	1,273	99
1907	1,048	95
1908	833	66
1909	1,393	105
1910	1,581	104
1911	1,339	74
1912	1,068	91
1913	1,764	110
1914	1,490	41

DIPHTHERIA—REPORTED CASES AND DEATHS BY MONTHS

MONTHS.	CASES.	DEATHS	DEATHS
			SOHO HOSPITAL.
January	207	2	5
February	140	4	12
March	130	6	10
April	118	3	3
May ..	108	5	10
June ..	123	1	5
July ..	105	1	3
August ..	58	4	1
September	84	1	1
October	134	3	3
November	151	4	2
December	132	7	1
Total	1,490	41	56

DIPHTHERIA (ANTITOXIN USED).

YEAR	CASES.	DEATHS.	PERCENTAGE.
1896	384	52	13
1896	905	106	11
1897	563	61	11
1898	646	68	10½

1879	708	70	8 77-250
1880	987	80	8 1-10
1881	955	58	6 1-10
1882	775	61	7 4-10
1883	653	71	7 5-10
1884	1,100	95	6 7-10
1885	1,021	82	5 77-100
1886	1,171	72	6 1-10
1887	913	64	7
1888	720	49	6 7-10
1889	1,117	64	5 7-10
1890	1,052	80	6 3-10
1891	1,007	56	4 5-10
1892	1,005	76	7 56-100
1893	1,389	89	5 97-100
1894	106	78	5 5-100

DIPHTHERIA (ANTITOXIN NOT USED).

YEAR	CASES.	DEATHS.	PERCENTAGE
1877	937	221	23
1878	356	112	31
1879	406	76	19
1880	373	65	17½
1881	372	54	14½
1882	430	63	14 6-10
1883	198	45	22 7-10
1884	210	44	19
1885	197	49	24 87-100
1886	254	55	21 65-100
1887	193	28	14 5-10
1888	102	27	26 4-10
1889	126	31	24 6-10
1890	80	17	21 2-10
1891	121	41	33 8-10
1892	138	24	18
1893	92	18	19 5-10
1894	93	15	16 12-100
1895	105	21	20
1896	82	11	13 4-10

MEASLES.

Measles was made reportable to this Board April 2, 1912. The cases reported are many in number, but the deaths are incomplete, many being probably registered under complications.

	CASES	DEATHS.		CASES	DEATHS.
January	1,369	11	August	37	
February	1,589	10	September	10	
March	1,461	9	October	21	
April	705	6	November	20	.
May	349	6	December	27	
June	176	.		—	—
July	61	2	Total	5,824	44

WHOOPIING COUGH.

This disease was made reportable to Board of Health June 4, 1912. The cases are fairly well reported; the deaths are probably registered under complications.

For 1914 we had reported:

	CASES.	DEATHS.		CASES.	DEATHS.
January	84	..	August	79	5
February	60	..	September	73	2
March	61	1	October	76	2
April	95	2	November	108	.
May	74	2	December	149	.
June	74	3		—	—
July	74	2	Total	1,007	19

CHICKEN POX.

This disease was made reportable by Amendment to State Law passed June 11. We have only a partial list in reported cases 1912—211 cases.

FOR YEAR 1914

	CASES
January	215
February	154
March	175
April	154
May	175
June	197
July	35
August	19
September	4
October	5
November	14
December	24
Total	1,667

PURULENT OPHTHALMIA.

This disease was made reportable June 4, 1912.

	CASES
January	4
February	2
March	2
April	1
May	
June	5
July	3
August	3
September	3
October	1
November	2
December	4
Total	30

For 1913 we had reported 29 cases.

TRACHOMA.

Made reportable under Amended Law, 1911, approved July 6, 1911. Seventy-five per cent. of these cases end in blindness.

	CASES.
January	5
February	8
March	9
April	12
May	4
June	4
July . . . . .	.
August	2
September	1
October	3
November	14
December . . . . .	.
Total	67

For 1913 we had 105 cases.

MALARIA.

This is made a reportable disease under amended law, 1911; approved July 6, 1911. The following cases have been reported:

1914.	CASES.
January	1
February	3
March . . . . .	.
April	4
May	5
June	6
July	5
August	6
September	6
October	7
November	1
December . . . . .	.
Total	44

There was recorded one death from Malaria in January, 1913.
No deaths in 1914

SMALLPOX.

No cases were reported for 1914, but a number of "suspects" were examined.

The following table gives our record in this disease

YEAR	CASES	DEATHS
1894	131	18
1895	13	2
1896		
1897		
1898		
1899	22	
1900	15	1
1901	387	71
1902	901	187
1903	25	3
1904	1	
1905	1	
1906		
1907	20	
1908	2	
1909	1	
1910	..	
1911		
1912	4	
1913	..	..
1914		
	<hr/> 1,523	<hr/> 282

Mortality for 21 years, 18.51%.

VACCINATIONS.

1901	28,288
1902	29,043
1903	4,671
1904	5,555
1905	8,243
1906	3,052
1907	1,954
1908	1,710
1909	1,401
1910	5,156
1911	5,828
1912	6,400
1913	5,537
1914	568
Total	104,136

VACCINATIONS—1914.

MONTH.	CITY DISPENSARY.
January	10
February	12
March	36
April	50
May	95
June	72
July	60
August	45
September	85
October	45
November	36
December	22
Total	568

EPIDEMIC MENINGITIS.

During 1914 we have reported 16 cases and 8 deaths

MONTH.	CASES.	DEATHS
January .. . . . .	..	..
February	1	..
March	2	..
April	3	2
May	2	..
June	3	2
July	2	2
August .. . . . .	..	..
September	1	1
October .. . . . .	..	..
November	2	1
December .. . . . .	..	..
Total	16	8

Our record in this disease stands as follows:

YEAR	CASES.	DEATHS.
1905	110	90
1906	25	20
1907	55	38
1908	11	11
1909	8	7
1910	3	1
1911	7	5
1912	7	5
1913	17	8
1914	16	8

MUMPS.

This disease was made reportable to the Board of Health June 4, 1912. The reported cases for 1914 stand as follows:

MONTH.	CASES.	MONTH.	CASES.
January	53	August	19
February	46	September	9
March	66	October	21
April	65	November	8
May	88	December	12
June	77		
July	74	Total	165

The previous year, 1913, 655 cases reported

TUBERCULOSIS.

We present here for 1914 the reported cases of Tuberculosis. This includes all forms of the disease. A slight increase in number is noted, but we consider the disease is being better reported.

REPORTED CASES ALL FORMS TUBERCULOSIS, 1914

MONTH.	CASES.
January	17
February	125
March	124
April	142
May	108
June	220
July	172
August	164
September	162
October	170
November	192
December	128
Total	2116

TABLE DEATHS 1911 FROM PULMONARY TUBERCULOSIS AND ALL FORMS TUBERCULOSIS

MONTH.	PULMONARY		ALL FORMS	
	TUBERCULOSIS	SOHO	TUBERCULOSIS.	
January	62	14	68	
February	52	10	59	
March	62	9	77	
April	60	9	65	
May	56	6	66	
June	38	8	43	
July	41	5	47	
August	39	7	44	
September	41	10	53	
October	36	10	42	
November	53	5	60	
December	43	7	52	
Total	583	100	676	Newark 100 Soho 776 Deaths

Table showing Total Death Rate from all causes:
also Deaths and Death Rates from Pulmonary Tuberculosis, and also all forms Tuberculosis.

YEAR	Total Deaths	Total Death Rate per M.	Total Deaths Pulmonary Tubere.	Death Rate Pulmonary Tubere.	Total Deaths All Forms Tubere.	Death Rate All Forms Tubere per M.
1890	5,006	20.34	603	2.45	676	2.74
1891	4,806	19.22	581	2.32	630	2.52
1892	4,943	19.38	556	2.18	660	2.59
1893	4,923	18.50	626	2.35	718	2.70
1901	5,378	19.77	651	2.39	775	2.84
1902	5,025	17.74	647	2.28	781	2.84
1903	5,025	17.74	647	2.28	781	2.75
1904	5,551	19.14	685	2.36	851	2.93
1905	5,724	19.08	685	2.28	797	2.65
1906	5,207	17.07	628	2.06	795	2.60
1907	5,529	17.77	596	1.916	764	2.45
1908	5,784	16.64	681	1.96	812	2.40
1909	5,337	15.16	584	1.66	707	2.01
1910	5,422	14.65	506	1.37	596	1.61
1911	5,562	14.63	631	1.66	733	1.93
1911	5,809	14.7	581	1.47	670	1.71

INDUSTRIAL DISEASES.

Under the provisions of Chapter 351, Laws 1912, physicians are required to report certain diseases contracted as the result of occupation. These are lead, phosphorus, arsenic or mercury or their compounds, or from compressed air illness. Thirty days are allowed to report the cases and the penalty is twenty five dollars. We group these diseases together.

CASES REPORTED 1914.

LEAD POISONING

	CASES.
January	5
February	3
March	4
April	..
May	2
June	4
July	4
August	4
September	5
October	8
November	6
December	3
Tota.	48

For 1913 we had 40 cases.

ARSENIC POISONING.

One case reported in 1913. 1914, two cases.

MERCURY POISONING.

One case reported in 1913. No cases in 1914.

COMPRESSED AIR ILLNESS

One case reported in 1913. No cases in 1914.

PHOSPHORUS POISONING

No cases reported in 1913. No cases in 1914.

EPILEPSY AND MENTAL DEFICIENCY.

Under provisions Chapter 182, Laws 1912, to secure better care and supervision and to collect statistical data, physicians are required to report these diseases to the Board of Health. The penalty is \$50. The following cases were reported in 1914:

EPILEPSY CASES REPORTED IN 1914

	CASES.	DEATHS.
January	5	
February	1	
March		
April		
May	8	
June	1	
July	1	
August	2	-
September	7	
October		
November	1	-
December	5	1

Total 62

For 1913 we had 42 cases and 14 deaths

MENTAL DEFICIENCY REPORTED IN 1914

	CASES
January	1
February	1
March	1
April	1
May	1
June	1
July	1
August	1
September	5
October	15
November	5
December	5

Total 41

For 1913, 100 cases were reported

DEATHS IN INSTITUTIONS, 1914.

City Hospital	832
St. Michael's Hospital	263
German Hospital	89
Beth Israel Hospital..	104
Presbyterian Hospital	19
Home for Incurables	19
Alms House	35
St. James' Hospital	65
Babies' Hospital	153
Homeopathic Hospital	34
St. Barnabas' Hospital..	75
Baptist Home	5
Women's and Children's Hospital	1
Little Sisters of the Poor.	24
Essex County Jail.	4
Home for Aged	15
Newark Private Hospital	27
Maternity Hospital	3
Public Service Building.	1
Memorial Day Nursery.	1
House Good Shepherd.	3
St. Mary's Orphanage	1
Dr. Waite's Hospital.	5
Rescue Home	1
Eye and Ear Infirmary..	9
Florence Crittendon Home	1
City Dispensary	1
St. Vincent's Academy	1
Police Station	1
Home for Crippled Children	3
Krueger Greisenheim	1
Continental Hotel	1
Total	1 699

Deaths in institutions equal 30.02% Total deaths,
5,659.

BIRTHS, 1914.

White	11,141
Colored	337
Male	5,857
Female	5,621
Native father	4,254
Native mother	5,188
Foreign father only.	7,224
Foreign mother only	6,290
Name stated	10,428
Name not stated.....	1,050
Legit.mate	11,311
Illegitimate	167
Total births	11,478
Rate per thousand.....	29.05

STILL BIRTHS FOR 1914

Male	295
Female	222
Legit. & illegitimate	205
Not stated	31
Mother, native and foreign.....	211
Not stated	29
White	497
Colored	20
Total still births	517
Rate per thousand.....	1.30

MARRIAGES, 1914.

White Male	4837
Colored Male	108
White Female	3848
Colored Female	107
Native Male	4945
Native Female	3173
Foreign Male	1310
Foreign Female	1842
First Marriage Male	3930
First Marriage Female	5693
Second Marriage Male..	34
Second Marriage Female	248
Third Marriage Male.....	15
Third Marriage Female.....	4
Total	9915
Rate per thousand	9.08

CASES AND DEATHS (NEWARK CASES) SENT TO
 ESSEX COUNTY ISOLATION HOSPITAL,
 SOHO, N. J., 1914

MONTH	Tuberculosis		Scarlet Fever		Diphtheria	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
January	17	8	52	—	67	9
February	14	14	64	2	43	5
March	13	10	60	7	50	12
April	15	9	56	3	47	10
May.....	26	9	83	2	28	3
June	19	6	87	2	20	10
July	15	8	79	3	21	5
August	24	5	17	2	25	3
September	22	7	24	—	28	1
October	23	10	52	—	27	1
November.....	14	10	25	1	62	3
December.....	15	5	55	—	75	2
Totals	217	101	654	22	493	6

Total cases, 829. Total deaths, 187.

DIPHTHERIA BY WARDS—1914

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	1	1	2	7	3	8	7	6	10	1	5	11	8	20	1	18	201
February	10	1	20	2	1	9	7	2	10	1	3	6	11	17	5	12	127
March	1	1	11	3	1	12	4	0	10	6	3	7	10	12	3	7	111
April	1	3	20	1	7	7	12	5	4	7	7	9	3	6	1	8	148
May	8	1	18	1	7	11	10	4	2	10	1	1	1	11	1	7	118
June	3	1	20	3	1	4	8	6	8	2	3	3	8	14	8	11	121
July	1	1	3	1	1	1	1	5	1	4	9	8	6	12	8	10	107
August	1	1	10	1	2	1	1	2	1	3	1	4	4	4	2	3	78
September	10	1	22	1	2	1	3	5	2	7	2	3	6	4	1	11	81
October	10	2	16	1	7	8	10	10	4	10	4	7	1	14	3	16	171
November	1	1	21	0	1	13	6	15	8	4	8	5	19	24	2	14	191
December	11	1	1	2	5	7	10	6	1	5	8	4	12	27	2	10	141
Totals	111	7	151	1	41	10	82	66	74	44	61	68	115	166	50	135	1,410

SCARLET FEVER BY WARDS—1914

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	10	3	12	7	1	13	8	11	17	5	9	3	18	14	9	32	211
February	1	8	6	8	1	27	12	12	9	8	5	8	19	14	4	37	218
March	11	7	112	4	6	18	10	24	18	7	6	9	13	15	6	16	282
April	10	3	69	7	7	14	20	15	6	4	10	4	11	22	9	22	233
May	4	4	49	5	3	19	21	7	5	4	4	8	16	22	11	24	206
June	8	3	29	4	8	7	21	9	4	8	3	9	27	18	6	15	160
July	1	0	17	3	6	3	4	5	0	4	1	3	5	13	1	10	76
August	5	0	9	3	0	2	1	1	4	0	0	2	5	2	3	3	38
September	2	0	2	2	5	1	5	2	1	2	2	1	3	4	3	1	36
October	1	6	3	2	1	1	1	3	6	7	1	0	3	8	0	6	50
November	2	3	6	0	4	2	3	2	1	8	3	4	5	10	1	7	61
December	2	2	6	1	1	1	4	3	11	7	6	5	1	3	1	11	71
Totals	71	39	438	46	46	110	93	94	82	64	50	56	120	151	54	184	1,640

TYPHOID FEVER BY WARDS—1914

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	1	0	1	1	2	0	0	0	0	0	1	1	2	7
February	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	3
March	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	4
April	2	3	1	0	2	2	0	0	0	1	1	0	1	1	0	1	15
May	2	0	1	3	0	0	1	0	0	1	1	0	0	2	1	0	14
June	0	1	3	1	1	0	0	0	2	1	0	1	5	0	1	0	16
July	0	2	0	1	0	0	2	0	0	1	1	0	93	0	0	2	102
August	4	0	4	1	1	4	0	1	2	0	0	3	2	1	0	0	27
September	0	0	2	1	2	1	0	1	0	1	2	1	1	3	2	4	21
October	7	0	1	1	2	2	3	2	0	1	0	0	2	0	1	3	23
November	1	1	0	0	1	1	0	1	0	0	1	0	0	0	0	0	5
December	1	0	2	0	0	2	0	1	0	1	0	0	0	2	0	0	10
Totals	17	7	11	9	10	13	7	11	4	11	6	5	104	12	6	14	250

CLASSIFIED

MORTUARY REPORT

1914

MORTUARY REPORT 1914

DISEASES	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
I. General Diseases.													
(a. Epidemic Diseases)													
Typhoid fever	2	1	0	2	6	3	0	3	3	1	3	2	26
Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	11	10	9	6	6	0	2	0	0	0	0	0	44
Scarlet fever	6	2	5	2	1	1	3	1	0	1	1	1	27
Whooping cough	0	0	1	2	2	3	2	3	2	2	0	0	19
Diphtheria and croup	2	4	6	3	5	1	1	4	1	3	1	7	41
Influenza	3	4	2	1	1	1	0	0	0	0	1	0	16
Cholera morbus	0	0	0	0	0	0	1	0	0	0	0	0	0
Dysentery	0	0	1	0	0	0	1	2	3	0	0	0	7
Erysipelas	3	7	3	2	5	2	1	3	3	1	2	1	33
Other epidemic diseases	0	0	0	1	0	0	0	0	0	0	0	0	0
(b. Other General Diseases)													
Purulent Infection and Septicaemia	0	3	1	1	1	0	2	3	0	3	2	4	21
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis													
Lungs	62	32	62	60	56	38	41	30	41	36	33	43	383
Larynx	0	1	0	0	1	0	0	0	0	0	0	0	2
Meninges	4	3	12	2	5	3	3	2	6	4	4	3	51
Abdominal	1	2	1	2	1	0	0	2	1	1	2	1	14
General tuberculosis	1	1	2	0	1	2	1	0	3	1	1	2	15

MORTUARY REPORT—1914—Continued

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DISEASES	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Potts disease	0	0	0	0	0	0	2	1	0	0	0	0	3
Other forms of tuberculosis .. .	0	0	0	1	2	0	0	0	2	0	0	3	8
Syphilis .. .	0	1	1	0	0	0	1	1	2	1	1	3	11
Cancer—			3	2	1	1	4	1	3	2	2	5	26
Buccal cavity .. .	1	1											
Stomach and liver .. .	7	6	12	11	13	12	9	8	10	5	12	10	115
Peritoneum, intestines, rectum .. .	1	1	5	1	5	8	3	5	6	5		7	51
Female genital organs .. .	2	1	6	5	2	1	7	5	2	7	3	1	48
Breast .. .	1	2	1	1	1	1	3	3	0	3	2	2	20
Skin .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Organs not specified .. .	1	10	3	0	2	5	1	2	1	1	1	1	26
Other tumors .. .	4	2	3	3	4	2	0	5	7	3	6	2	41
Acute articular rheumatism .. .	1	0	2	1	0	0	1	0	0	0	0	1	6
Chronic rheumatism and gout .. .	1	1	0	1	0	1	1	1	0	0	1	0	7
Diabetes .. .	4	3	8	7	8	3	5	7	5	5	6	6	67
Exoptalmia, cataract .. .	0	0	1	0	0	1	1	0	0	0	0	0	2
Addison's disease .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Leukemia .. .	0	0	2	0	0	3	0	0	2	0	2	2	11
Anemia—Chlorosis .. .	2	1	1	1	1	1	2	0	0	0	2	1	12
Acute and chronic alcoholism .. .	2	0	5	5	3	3	1	0	0	3	1	5	31
Chronic lead poisoning .. .	0	0	1	1	0	0	0	0	0	0	1	0	3
Other chronic poisonings .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Other general diseases .. .	0	1	2	0	0	0	3	1	1	0	0	0	8

BOARD OF HEALTH.

MORTUARY REPORT 1914—Continued

DISEASES	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
II Nervous System													
Encephalitis	0	0	0	0	0	0	0	0	0	1	0	1	2
Spinal meningitis	1	5	6	6	1	2	4	7	1	3	2	3	46
Epidemic meningitis	0	0	0	2	0	2	2	0	1	0	1	0	8
Locomotor ataxia	0	0	1	0	0	1	0	1	0	0	0	1	4
Other diseases of spinal chord	0	0	0	0	0	0	0	0	0	0	0	1	1
Congestion and hemorrhage of brain	33	43	33	33	28	22	19	25	26	27	27	25	341
Softening of brain	2	0	0	0	0	0	1	0	2	0	0	0	5
Paralysis without specified cause	0	3	0	2	4	2	0	3	7	1	2	1	25
General paralysis	1	0	2	0	2	2	0	0	0	0	0	0	7
Other forms of mental alienation	0	2	2	0	1	1	0	0	1	1	0	1	9
Epilepsy	0	0	0	0	0	1	0	2	0	0	2	1	6
Convulsions (over 5 years)	0	0	0	0	0	0	0	0	0	0	0	0	0
Convulsions (under 5 years)	4	4	3	2	3	1	9	3	2	1	2	0	34
Chorea	0	0	0	1	1	0	1	0	0	0	0	1	4
Tetanus	0	0	0	0	0	0	1	0	0	1	0	0	2
Other nervous diseases	3	3	3	1	7	4	0	4	1	0	1	1	28
Diseases of eye and adnexa	0	0	0	0	0	0	0	0	0	0	0	0	0
Diseases of ear and adnexa	1	0	1	0	2	2	0	0	0	0	0	0	6
Infantile paralysis	1	0	0	0	0	0	0	0	0	0	0	0	1

MORTUARY REPORT 1914—Continued

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BOARD OF HEALTH.

DISEASES	Jan.	Feb	Ma	April	May	June	July	Aug.	Sept	Oct	Nov	Dec.	Total
III. Circulatory System.													
Pericarditis	0	0	1	0	0	0	1	0	0	0	0	0	1
Acute endocarditis	9	4	11	9	7	6	9	5	2	7	1	6	82
Organic diseases of heart	72	50	71	45	56	37	39	30	20	50	78	53	545
Angina pectoris	4	2	1	2	0	1	0	0	2	2	0	1	21
Diseases of arteries aneurism	6	8	5	1	4	2	2	1	10	1	0	5	48
Embolism and thrombosis	3	4	1	5	4	2	0	0	0	1	0	4	24
Diseases of veins	0	0	1	0	0	0	0	0	0	0	0	0	1
Diseases of lymphatic system	0	0	1	0	0	0	0	0	0	0	0	0	1
Hemorrhages	0	2	2	2	1	1	2	1	0	1	1	2	15
Other circulatory diseases	1	0	0	0	4	2	0	1	1	0	1	1	13
IV.—Respiratory System.													
Diseases of nasal fossae	1	0	1	0	0	0	0	0	0	0	0	0	1
Acute bronchitis	8	4	16	4	2	0	2	1	2	4	2	0	49
Chronic bronchitis	3	7	1	2	2	0	0	2	1	2	2	6	31
Broncho pneumonia	38	52	29	31	28	24	11	14	18	15	20	28	253
Pneumonia	41	75	71	49	51	28	12	11	15	21	28	11	415
Pleurisy	1	2	2	2	4	1	1	1	1	2	1	2	26
Congestion and apoplexy of lungs	0	0	0	0	0	0	1	0	0	0	2	0	5
Gangrene of lungs	0	0	0	0	0	0	0	0	0	0	0	0	0
Asthma	2	3	0	0	1	0	0	2	1	0	0	0	12
Pulmonary emphysema	0	0	0	0	0	0	0	0	0	0	0	0	0
Other respiratory diseases	2	4	3	0	2	1	4	0	2	1	1	1	25
Diseases of larynx	1	0	0	0	0	1	0	0	0	0	0	0	2

MORTUARY REPORT 1914—Continued

DISEASES	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct.	Nov	Dec.	Total
V. Digestive System.													
Diseases of mouth and adnexa	0	0	0	0	0	0	0	0	0	1	0	0	1
Diseases of pharynx	0	2	1	0	0	0	1	0	0	0	0	0	4
Diseases of oesophagus	0	0	0	0	1	0	0	0	0	0	1	0	2
Ulcer of stomach	0	0	1	1	4	1	2	2	2	3	3	1	26
Other diseases of stomach, except cancer	2	0	2	4	3	1	0	1	1	0	1	4	19
Diarrhea and enteritis (under 2 years)	9	4	9	6	9	17	8	9	51	29	20	10	149
Diarrhea and enteritis (over 2 years)	2	3	0	2	1	1	4	12	7	5	2	0	42
Hernia and obstruction	4	4	4	1	5	3	5	5	0	6	6	7	53
Cirrhosis of liver	5	7	4	1	8	3	4	7	6	3	5	5	61
Biliary calculi	1	0	0	0	1	1	1	1	2	1	1	0	9
Other diseases of liver	1	0	0	3	1	5	3	1	0	0	0	1	12
Simple peritonitis	2	1	2	3	2	0	1	0	1	3	0	1	16
Appendicitis	4	2	2	2	2	7	4	5	2	3	2	3	39
Other digestive diseases	0	0	1	0	0	0	1	2	1	1	1	0	11
Yellow atrophy of liver	0	0	0	0	0	0	0	0	0	0	0	1	1
VI. Genito-Urinary System.													
Acute nephritis	9	5	4	3	7	7	5	4	1	5	1	10	62
Bright's disease	33	34	9	8	27	38	31	21	36	20	20	40	390
Other diseases of kidneys	2	0	1	1	2	1	1	0	1	0	0	0	9
Diseases of bladder	1	1	0	1	1	1	1	0	0	2	0	1	9
Other diseases female genitals	0	0	0	1	0	0	0	0	0	0	0	0	1

MORTUARY REPORT—1914—Continued

DISEASES	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct.	Nov	Dec	Total
Diseases of prostate	0	0	0	0	0	0	2	1	1	0	0	1	5
Cysts and tumors of ovary	0	0	0	0	0	0	1	1	0	0	0	0	2
Diseases of urethra	0	0	0	0	0	0	0	1	0	0	0	0	1
Genitourinary tract	0	0	0	0	0	0	0	0	0	1	0	0	1
VII. Puerperal State.													
Accidents of pregnancy	0	0	1	1	2	1	0	0	0	1	0	0	6
Puerperal hemorrhage	1	1	2	1	1	0	1	1	1	1	0	0	10
Other accidents of labor	0	1	0	2	3	0	1	2	5	1	0	0	15
Puerperal septicæmia	5	2	1	0	3	0	0	2	1	1	1	1	16
Puerperal albumenuria and convulsions	2	0	1	1	1	1	0	0	0	0	0	0	5
Other puerperal accidents	0	0	0	0	0	1	0	2	0	0	2	1	6
VIII. Diseases of Skin and Cellular Tissue													
Gangrene	1	0	1		1	0	0	0	0	0	0	1	3
Furuncle carbuncle	0	0	0	0	0	0	0	0	0	0	0	0	0
Acute abscess and phlegmon	2	1	1	1	1	0	0	0	0	1	0	0	10
Other diseases of skin	1	0	1	0	0	0	0	1	0	1	0	0	4

MORTUARY REPORT 1914—Continued

DISEASES	Jan.	Feb.	Mar.	April	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
IX. Organs of Locomotion.													
Rickets	0	1	0	0	1	0	1	1	0	0	0	1	5
Non-tubercular diseases of bones	0	0	0	0	0	0	1	0	0	0	0	0	1
Other diseases of organs of locomotion	0	0	0	0	0	0	1	0	0	0	0	0	1
X—Malformation.													
Congenital malformation	6	9	1	2	5	3	3	5	2	5	3	3	50
XI—Early Infancy.													
Congenital debility icterus	1	1	1	1	4	14	21	3	33	35	29	32	166
Other diseases of early infancy	24	27	29	17	12	18	3	19	1	4	5	4	184
XII.—Old Age.													
Senile debility	10	8	6	2	7	1	2	4	6	3	8	0	64

MORTUARY REPORT—1914—Continued

DISEASES	Jan	Feb	Mar	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec	Total
XIII.—External Causes.													
Suicide by —													
Poison	0	1	1	3	5	1	1	2	2	2	1	1	17
Asphyxia	1	2	0	1	0	3	1	2	3	3	0	2	21
Hanging	1	0	0	0	1	0	1	2	0	1	0	0	6
Drowning	0	0	0	0	0	2	0	0	1	1	1	0	5
Firearms	1	0	2	1	3	0	2	1	3	0	0	3	18
Cutting instruments	0	1	0	0	2	0	0	0	1	0	2	0	6
Crushing	0	0	0	0	0	0	0	1	0	0	0	0	2
Other suicides	0	0	0	1	0	0	0	0	0	0	0	1	2
Homicide	1	1	2	0	2	1	1	0	0	2	0	0	13
Fractures	6	5	5	4	5	5	1	1	1	3	0	0	40
Dislocations	0	0	1	0	0	0	0	0	0	0	0	0	1
Burns and scalds	3	1	5	2	7	3	2	1	4	3	1	2	38
Sunstroke	0	0	0	0	0	0	5	2	0	0	0	0	7
Freezing	0	4	0	0	0	0	0	0	0	0	0	0	4
Electric shock	0	0	2	0	1	1	0	0	0	0	0	0	4
Accidental drowning	0	1	1	0	2	3	5	2	3	0	0	0	21
Inanition (starvation)	0	0	0	0	0	0	0	0	0	0	0	0	0
Absorption of gases	2	5	1	3	2	1	2	1	1	1	5	0	27
Other acute poisons	1	0	0	0	1	0	1	2	0	1	0	0	6
Other accidental traumatism	3	2	2	7	6	1	10	4	7	1	0	0	61
Other external violence	2	4	0	2	2	1	1	4	3	1	2	0	32
XIV.—Ill-defined Causes													
Cause of death ill-defined	2	1	0	0	0	0	1	0	0	0	0	1	5

Total deaths, all causes

555

MORTUARY REPORT—1914—Continued

AGE	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov	Dec.	Total
Under 3 months	3	4	38	50	49	47	38	37	36	60	32	73	604
3 to 12 months	30	31	39	34	35	29	73	72	42	39	20	33	417
1 to 2 years	28	33	37	27	24	27	21	32	25	9	16	18	297
2 to 5 years	20	23	31	11	23	17	12	16	21	15	16	14	219
5 to 20 years	30	22	31	19	31	25	30	25	21	21	23	21	305
20 to 60 years	200	244	202	211	239	173	164	160	115	158	173	181	2,317
Over 60 years	179	140	159	114	117	85	85	84	117	85	104	146	1,780
Totals	519	547	608	466	518	398	443	446	427	387	408	492	5,059
COLOR													
White	486	542	576	444	495	346	422	419	412	370	403	477	5,391
Colored	34	27	32	22	23	22	21	27	15	16	16	15	267
Yellow	0	0	0	0	0	0	0	0	0	1	0	0	1
Totals	519	547	608	466	518	398	443	446	427	387	408	492	5,059
SEX													
Male	262	307	345	248	187	111	247	237	240	194	211	204	3,169
Female	257	240	263	218	231	187	196	189	187	193	197	228	2,890
Totals	519	547	608	466	518	398	443	446	427	387	408	492	5,059

ANNUAL REPORT

OF THE

Medical Director of the Newark

City Sanatorium for Tuberculosis

ANNUAL REPORT

OF THE

Medical Director of the Newark

City Sanatorium for Tuberculosis

David D. Chandler, Esq., Health Officer:

DEAR SIR I have the honor to present the following report of the work of the Newark City Sanatorium for Tuberculosis, Verona, N. J., for the year ending December 31st, 1914.

The Sanatorium was opened for the reception of patients January 21, 1908.

From January 21, 1908, to January 1, 1915, 1,162 patients have been treated.

	1908	1909	1910	1911	1912	1913	1914	Tot'ls
Admissions	129	147	156	157	213	172	188	1,162
Discharges	72	154	153	166	200	188	176	1,109

Patients in Institution January 1, 1915 53

TABLE NO. I.

Patients in Institution Jan. 1, 1914.....	41
Patients admitted during 1914.....	188
Patients treated in 1914.....	229
Patients discharged in 1914.....	176
Patients in Institution Jan. 1, 1915	53

TABLE NO II

Admissions and Discharges Monthly, 1914.

	ADMITTED.	DISCHARGED
January	19	13
February	9	10
March	15	10
April	9	9
May	14	21
June	20	8
July	18	15
August	16	26
September	23	19
October	15	19
November	17	16
December	13	15
	188	171

TABLES III. AND IV. GENERAL RESULTS

	No. Cases	Quiescent	Improved	Unimproved
Inipient Tuberculosis.....	106	57	40	9
Mod. ratly Advanced Tuberculosis.....	56	11	30	15
Advanced Tuberculosis.....	4	0	0	4
Totals.....	166	68	70	28

RESULT	1908		1909		1910		1911		1912		1913		1914	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Apparently cured	6	11.1	10	7.6	6	4.4	3	2.0						
Quiescent	22	40.7	55	41.6	68	19.6	45	30.6	32	16.6	47	25.2	68	40.0
Improved	19	35.2	45	34.1	18	35.0	72	49.0	130	65.0	112	59.5	70	42.0
Unimproved	6	11.1	22	16.6	14	10.2	25	17.0	37	18.5	28	14.8	27	16.2
Deaths	1	1.8			1	0.7	2	1.4	1	0.5	1	0.5	1	1.7
Totals	54		132		137		147		200		188		166	

TABLE V.—GAIN AND LOSS OF WEIGHT

	1908	1909	1910	1911	1912	1913	1914
Patients who gained weight	45	124	122	121	144	158	141
Patients who lost weight	9	8	15	26	23	30	25
Totals	54	132	137	147	167	188	166
Average gain per patient	10 lbs., 4 ozs.		Average loss per patient		2 lbs.		
MAXIMUM INDIVIDUAL GAIN							
Male patient	33 lbs., 4 ozs.		Female patient		27 lbs., 8 ozs.		

TABLE NO. VI.

Under 15 years	1
15 to 20 years.	27
20 to 30 years	67
30 to 40 years...	46
40 to 50 years.	16
Over 50 years..	5
	<hr/> 166

TABLE NO. VII

Marr.ed	86
Single	80

TABLE NO. VIII.

Occupation.

Housework	5	Laborers	4
Waiters	3	Stenographers	2
Printers	4	Jewelers	3
Machinists	8	Cloth Cutter	1
Factory	21	Horseshoer	1
Hatters	2	Public Service Inspector	1
Glass Designer	1	Painters	4
Wood Turner	1	Leather Workers	3
Detective	1	Newsdealer	1
Toolmakers	5	School	5
Chauffeur	1	Millinery	1
Saleswomen	6	Metal Workers	3
Clerks	12	Stationary Fireman	1
Post Office Clerk	1	City Hospital Laborer	1
Bartenders	4	Paper Hanger	1
Peddlers	3	Real Estate Agent	1
Baggage Master	1	Electrician	1
Barbers	2	Baker	1
Carpenters	7	Metal Polisher	1
Police Officers	4	Butcher	1
Drug Clerk	1	Candy Maker	1
Salvation Army	1	Actress	1
Motormen	2		—
Teamsters	5		166

In the compilation of the foregoing tables, ten patients staying less than nine days are not considered, and as the average length of stay is three months, any patients which might be in the apparently cured class are included with the class styled quiescent.

Respectfully submitted,

JOHN L. MEEKER, M. D.,

Medical Director.

Tables I, II and III

**Condition, Result and Number of Days
Treated in Institution**

1914

TABLE I.
PATIENTS ADMITTED 1913 REMAINING IN INSTITUTION JANUARY 1, 1914.

No. of Patient	Diagnosis	No. of Days 1913	No. of Days 1914	Total Days	Result
885	Mod. Adv. Tuberc.	218	14	232	Improved
912	Mod. Adv. Tuberc.	175	25	200	Improved
918	Mod. Adv. Tuberc.	162	24	186	Quiescent
919	Incipient Tuberc.	160	15	175	Quiescent
921	Mod. Adv. Tuberc.	147	114	261	Improved
924	Incipient Tuberc.	147	26	173	Improved
928	Incipient Tuberc.	138	55	193	Quiescent
932	Incipient Tuberc.	69	1	70	Quiescent
934	Incipient Tuberc.	97	76	173	Quiescent
936	Incipient Tuberc.	96	64	160	Improved
937	Mod. Adv. Tuberc.	95	4	99	Quiescent
939	Incipient Tuberc.	90	126	216	Unimproved
941	Incipient Tuberc.	90	3	93	Quiescent
943	Mod. Adv. Tuberc.	74	124	198	Unimproved
944	Incipient Tuberc.	70	55	125	Improved
945	Mod. Adv. Tuberc.	65	66	131	Improved
946	Incipient Tuberc.	63	55	118	Quiescent
947	Incipient Tuberc.	55	67	122	Quiescent
948	Mod. Adv. Tuberc.	54	148	202	Improved
949	Mod. Adv. Tuberc.	53	35	88	Quiescent
950	Incipient Tuberc.	51	80	131	Unimproved
952	Incipient Tuberc.	46	19	65	Quiescent
953	Incipient Tuberc.	44	94	138	Improved
954	Mod. Adv. Tuberc.	41	10	51	Unimproved
955	Incipient Tuberc.	40	101	141	Improved
957	Mod. Adv. Tuberc.	37	44	81	Improved
959	Incipient Tuberc.	32	53	85	Improved
960	Mod. Adv. Tuberc.	32	74	106	Improved
961	Mod. Adv. Tuberc.	27	81	108	Improved
962	Mod. Adv. Tuberc.	21	35	56	Unimproved
963	Mod. Adv. Tuberc.	19	117	136	Improved

TABLE I—Continued.

PATIENTS ADMITTED 1913 REMAINING IN INSTITU-
TION JANUARY 1, 1914.

No. of Pa- tient	Diagnosis	No. of Days 1913	No. of Days 1914	Total Days	Result
964	Incipient Tuberc.	19	88	107	Quiescent
965	Mod. Adv. Tuberc.	18	46	64	Improved
966	Incipient Tuberc.	14	168	182	Quiescent
967	Incipient Tuberc.	13	24	37	Improved
968	Mod. Adv. Tuberc.	11	202	213	Improved
969	Advanced Tuberc.	11	144	155	Unimproved
970	Advanced Tuberc.	5	116	121	Improved
971	Incipient Tuberc.	2	14	16	Improved
972	Incipient Tuberc.	2	118	120	Improved
973	Mod. Adv. Tuberc.	2	69	71	Improved

TABLE II.

PATIENTS ADMITTED AND DISCHARGED IN 1914

Number of Patient	Diagnosis	Result	No. of Days Treated in 1914
974	Incipient Tuberc.	Improved	156
975	Mod. Adv. Tuberc.	Unimproved	177
976	Mod. Adv. Tuberc.	Quiescent	120
977	Mod. Adv. Tuberc.	Improved	131
978	Incipient Tuberc.	Quiescent	118
979	Incipient Tuberc.	No stay	3
980	Mod. Adv. Tuberc.	Quiescent	129
981	Mod. Adv. Tuberc.	Unimproved	137
982	Mod. Adv. Tuberc.	Improved	119
983	Incipient Tuberc.	Improved	123
984	Incipient Tuberc.	Quiescent	113
985	Incipient Tuberc.	Improved	38
986	Incipient Tuberc.	Quiescent	151
987	Mod. Adv. Tuberc.	Improved	78
988	Incipient Tuberc.	Quiescent	128
989	Incipient Tuberc.	Quiescent	63
990	Incipient Tuberc.	Quiescent	94
991	Incipient Tuberc.	Improved	91
992	Incipient Tuberc.	Improved	4
993	Incipient Tuberc.	Quiescent	89
994	Incipient Tuberc.	Improved	89
995	Mod. Adv. Tuberc.	Unimproved	137
996	Incipient Tuberc.	Quiescent	230
997	Incipient Tuberc.	Quiescent	86
998	Mod. Adv. Tuberc.	Improved	95
999	Incipient Tuberc.	Quiescent	52
1001	Mod. Adv. Tuberc.	Improved	119
1002	Incipient Tuberc.	Quiescent	122
1003	Incipient Tuberc.	Unimproved	123
1004	Incipient Tuberc.	Quiescent	68
1005	Incipient Tuberc.	Improved	104
1006	Mod. Adv. Tuberc.	Quiescent	227

TABLE II. Continued.

PATIENTS ADMITTED AND DISCHARGED IN 1911

Number of Patient	Diagnosis	Result	No. of Days Treated in 1911
1007	Incipient Tuberc.	Quiescent	73
1008	Incipient Tuberc.	Quiescent	85
1009	Mod. Adv. Tuberc.	Quiescent	125
1010	Incipient Tuberc.	Improved	121
1011	Mod. Adv. Tuberc.	Improved	122
1012	Incipient Tuberc.	Improved	122
1013	Incipient Tuberc.	Quiescent	110
1014	Mod. Adv. Tuberc.	Improved	148
1015	Mod. Adv. Tuberc.	Improved	48
1016	Incipient Tuberc.	Quiescent	85
1017	Mod. Adv. Tuberc.	Improved	122
1018	Mod. Adv. Tuberc.	Unimproved	3
1019	Incipient Tuberc.	Unimproved	125
1020	Incipient Tuberc.	Quiescent	110
1021	Incipient Tuberc.	Quiescent	128
1022	Incipient Tuberc.	Quiescent	110
1023	Mod. Adv. Tuberc.	Unimproved	110
1024	Incipient Tuberc.	Improved	49
1025	Incipient Tuberc.	Quiescent	120
1026	Mod. Adv. Tuberc.	Improved	175
1027	Mod. Adv. Tuberc.	Unimproved	68
1028	Mod. Adv. Tuberc.	Improved	120
1029	Mod. Adv. Tuberc.	Improved	125
1030	Incipient Tuberc.	Improved	68
1031	Incipient Tuberc.	Improved	125
1032	Incipient Tuberc.	Improved	110
1033	Incipient Tuberc.	Improved	48
1034	Incipient Tuberc.	Quiescent	85
1035	Incipient Tuberc.	Quiescent	115
1036	Incipient Tuberc.	Quiescent	115
1038	Incipient Tuberc.	Improved	110
1039	Incipient Tuberc.	Quiescent	115
1040	Incipient Tuberc.	Quiescent	111
1041	Incipient Tuberc.	Improved	74
1042	Incipient Tuberc.	Improved	64
1043	Mod. Adv. Tuberc.	Quiescent	122
1044	Incipient Tuberc.	Quiescent	85
1045	Mod. Adv. Tuberc.	Improved	148

TABLE II.—Continued.

PATIENTS ADMITTED AND DISCHARGED IN 1914

Number of Patient	Diagnosis	Result	No. of Days Treated in 1914
1046	Incipient Tuberc.	Quiescent	151
1047	Incipient Tuberc.	Quiescent	65
1048	Incipient Tuberc.	Quiescent	112
1049	Mod Adv. Tuberc.	Improved	97
1050	Incipient Tuberc.	Quiescent	153
1051	Advanced Tuberc.	Died	51
1052	Incipient Tuberc.	Quiescent	71
1053	Incipient Tuberc.	Quiescent	114
1054	Incipient Tuberc.	Quiescent	132
1055	Incipient Tuberc.	Improved	56
1056	Incipient Tuberc.	Unimproved	8
1057	Incipient Tuberc.	Quiescent	122
1058	Incipient Tuberc.	Quiescent	91
1059	Mod Adv. Tuberc.	Unimproved	9
1060	Incipient Tuberc.	Quiescent	52
1061	Incipient Tuberc.	Quiescent	62
1063	Mod Adv. Tuberc.	Quiescent	127
1064	Mod. Adv. Tuberc.	Unimproved	112
1068	Mod. Adv. Tuberc.	Unimproved	67
1069	Incipient Tuberc.	No change	14
1070	Incipient Tuberc.	Improved	69
1071	Incipient Tuberc.	Quiescent	148
1072	Mod Adv. Tuberc.	Quiescent	146
1073	Incipient Tuberc.	No change	6
1074	Mod. Adv. Tuberc.	Unimproved	6
1075	Incipient Tuberc.	Unimproved	8
1076	Incipient Tuberc.	Quiescent	54
1079	Incipient Tuberc.	Quiescent	122
1081	Incipient Tuberc.	Quiescent	131
1082	Mod. Adv. Tuberc.	Improved	45
1083	Advanced Tuberc.	Unimproved	9
1084	Incipient Tuberc.	Quiescent	81
1085	Incipient Tuberc.	No change	3
1086	Incipient Tuberc.	Improved	122
1088	Incipient Tuberc.	Quiescent	53
1089	Incipient Tuberc.	Quiescent	70
1091	Incipient Tuberc.	Improved	82
1092	Incipient Tuberc.	Quiescent	101

TABLE II -Continued.

PATIENTS ADMITTED AND DISCHARGED IN 1914.

Number of Patient	Diagnosis	Result	No of Days Treated in 1914
1093	Advanced Tuberc.	Unimproved	56
1096	Incipient Tuberc.	Improved	47
1098	Incipient Tuberc.	Improved	28
1099	Mod. Adv Tuberc.	Unimproved	28
1100	Incipient Tuberc.	Imp. oved	95
1102	Mod Adv Tuberc.	Unimproved	8
1103	Incipient Tuberc	Improved	22
1104	Incipient Tuberc.	Quiescent	67
1105	Incipient Tuberc.	Unimproved	68
1106	Incipient Tuberc.	Improved	33
1107	Mod. Adv Tuberc.	Quiescent	93
1111	Incipient Tuberc	Improved	80
1113	Incipient Tuberc.	Improved	57
1116	Incipient Tuberc.	Improved	50
1117	See Case 1070	Re-admitted	
1118	See Case 1104	Re-admitted	
1119	Mod. Adv Tuberc.	Improved	44
1120	Mod. Adv. Tuberc.	Unimproved	47
1122	Incipient Tuberc.	Improved	21
1123	Incipient Tuberc.	No change	10
1134	Advanced Tuberc.	Unimproved	16
1136	Mod Adv. Tuberc.	No change	3
1138	Mod Adv Tuberc.	Imp oved	30
1145	Mod. Adv Tuberc.	Improved	29
1152	Incipient Tuberc.	No change	12
1155	Incipient Tuberc.	No change	3
1158	Incipient Tuberc.	Unimproved	8

TABLE III.

PATIENTS ADMITTED IN 1914 REMAINING IN INSTITUTION JANUARY 1, 1915.

No. of Patient	Diagnosis	No. of Days Treated in 1914
1114	Incipient Tuberculosis	93
1100	Incipient Tuberculosis	309
1035	Incipient Tuberculosis	24
1062	Incipient Tuberculosis	182
1065	Incipient Tuberculosis	179
1066	Mod. Adv. Tuberculosis	178
1067	Incipient Tuberculosis	176
1077	Mod. Adv. Tuberculosis	153
1078	Incipient Tuberculosis	156
1080	Incipient Tuberculosis	147
1087	Mod. Adv. Tuberculosis	153
1090	Incipient Tuberculosis	132
1091	Incipient Tuberculosis	119
1095	Incipient Tuberculosis	119
1097	Incipient Tuberculosis	114
1101	Incipient Tuberculosis	116
1108	Mod. Adv. Tuberculosis	193
1109	Incipient Tuberculosis	39
1110	Incipient Tuberculosis	38
1112	Incipient Tuberculosis	96
1115	Mod. Adv. Tuberculosis	95
1121	Mod. Adv. Tuberculosis	83
1124	Incipient Tuberculosis	79
1125	Incipient Tuberculosis	77
1126	Incipient Tuberculosis	71
1127	Mod. Adv. Tuberculosis	69
1128	Mod. Adv. Tuberculosis	65
1129	Incipient Tuberculosis	64
1130	Mod. Adv. Tuberculosis	63
1131	Incipient Tuberculosis	63
1132	Incipient Tuberculosis	59
1133	Incipient Tuberculosis	59

TABLE III Continued.

PATIENTS ADMITTED IN 1914 REMAINING IN INSTITUTION JANUARY 1, 1915

No. of Patient	Diagnosis	No. of Days Treated in 1914
1135	Incipient Tuberculosis	55
1137	Incipient Tuberculosis	54
1139	Incipient Tuberculosis	48
1140	Incipient Tuberculosis	48
1141	Mod. Adv. Tuberculosis	45
1142	Mod. Adv. Tuberculosis	43
1144	Incipient Tuberculosis	36
1145	Incipient Tuberculosis	36
1146	Mod. Adv. Tuberculosis	36
1147	Mod. Adv. Tuberculosis	34
1148	Incipient Tuberculosis	34
1149	Incipient Tuberculosis	31
1150	Incipient Tuberculosis	29
1151	Incipient Tuberculosis	27
1153	Mod. Adv. Tuberculosis	22
1154	Incipient Tuberculosis	14
1156	Incipient Tuberculosis	13
1157	Mod. Adv. Tuberculosis	8
1159	Mod. Adv. Tuberculosis	5
1160	Incipient Tuberculosis	5
1161	Mod. Adv. Tuberculosis	3

These tables, Nos. I, II and III, represent 41 patients admitted in 1913 and treated in 1914, 135 patients admitted, treated and discharged in 1914, 53 remaining in the institution January 1, 1915, of course do not appear in this report of results.

Respectfully submitted,

JOHN L. MEEKER, M. D.,
Medical Director.

ANNUAL REPORT

OF THE

Superintendent of the Newark City

Sanatorium for Tuberculosis

ANNUAL REPORT

OF THE

Superintendent of the Newark City Sanatorium for Tuberculosis

To Mr. David D. Chandler, Health Officer:

DEAR SIR I herewith respectfully submit to you my report of the administration of the Newark City Tuberculosis Sanatorium for the year 1914

Total number of patients treated..... 229

SALARIES

Medical Director .....	.\$ 1,524.00
Superintendent and Head Nurse	1,200.00
Nurses (2)	1,320.00
Clerk	720.00
Engineer .. .	417.57
Cook	480.00
Assistant Cook	300.00
Kitchen Helper	213.68
Maids (3)	576.00
Waitresses (3)	603.00
Laundresses (3).... .	780.00
Orderlies (2)	598.49
Helper ...	324.33
Stableman	420.00
	<hr/> \$ 9,475.97

LIGHT, HEAT, POWER AND WATER

Electric Light	\$ 912 94
Coal	1,402 53
Wood	25 00
Electric Power	129 66
Water	672 35
	<hr/> \$ 3,142 48

DRUGS, ETC

Drugs	\$ 204 43
Gauze	720 00
Thermometers ..	84 00
Sputum Cups	183 00
	<hr/> \$ 1,191 43

FOOD SUPPLIES

Butter	\$ 1,17 66
Eggs	1,779 79
Milk	2,81 00
Sea Food	2,17 68
Groceries, Canned Goods, etc	2,382 28
Vegetables and Fruit.....	723 30
Meats ..	1,871 40
Bread, Cake, etc	831 17
Ice	764 08
Mineral Water	18 87
	<hr/> \$ 17,169 16

FURNITURE AND FIXTURES

Chairs	\$ 82 69
Clock	1 18
Baskets	5 18
Rubber Boots	1 76
Refrigerator	408 00
Flag	1 50
Fan	10 50
Cushions	2 05
Dresser	37 80
Tables ..	90 00
Mail Bag	5 00
Laundry Stove	16 50
	<hr/> \$ 575 61

IMPROVEMENTS AND REPAIRS

Plumbing Work	\$ 31 95	
Painting	150 19	
New Floor for Kitchen	178 00	
Repairs to Vehicles...	73 15	
Hardware	208 59	
Lumber	29 18	
Electrical Supplies ..	11 59	
Cleaning Cesspool ..	50 00	
Boiler Grates	23 06	
Repairing Motor ...	2 50	
Repairing Dumbwaiter	11 35	
Lime	3 50	
Stove Repairs ..	2 60	
Toilet Repairs ..	24 13	
Belting ..	6 32	
Trees ..	5 00	
		\$ 811 11

BEDS AND BEDDING

Blankets	\$ 416 50	
Pillow Cases	41 43	
Bed Spreads ..	8 63	
Bed Sheets ..	92 45	
Quilts ..	133 65	
		\$ 692 26

DRY GOODS

Muslin	\$ 7 88	
Towels ..	69 49	
Damask ..	76 14	
Crash ..	6 59	
Dresser Cover ..	3 77	
Linen ..	10 71	
		\$ 174 54

LAUNDRY SUPPLIES

Soap Polish ..	\$ 15 00	
Soap Chips	77 95	
Soap Powder ..	13 76	
Hampers ..	2 15	
Irons ..	2 67	
Wash Baskets ..	6 00	
		\$ 146 76

JANITOR'S SUPPLIES

Sweeping Compound	\$	46 44	
Ammonia		18 40	
Brooms, Brushes, Mops, etc.		45 48	
Disinfectant		11	
	\$		113 45

STABLE

Horse Feed	\$	241 20	
Horseshoeing		7 80	
Harness Repairs		8 80	
Blanket		2 00	
Whip		2 00	
Brush		50	
	\$		267 46

TABLE AND KITCHEN WARE

Crockery	\$	18 15	
Cutlery		18 10	
Pots, Pans, etc.		43 04	
	\$		270 61

MISCELLANEOUS EXPENSES

Alcohol	\$	5 00	
Freight and Express		46 01	
Stationery		30 00	
Telephone Service		50 00	
Car fares		10 00	
Postage Stamp		11 00	
Kerosene		10 80	
Paper Napkins		8 00	
Cleaning Windows		55 00	
Matches		1 10	
Newspapers		15 00	

BOARD OF HEALTH.

171

Drinking Cups	115 00	
Toilet Necessaries	43.03	
Bone Meal	3 75	\$ 755.80
		-
Total	\$ 34,806.75	
Less Receipts	129.02	
		-
		\$ 34,677.73

In conclusion I wish to thank the members of the Board and the members of the Sanatorium Committee for their sincere co operation which enabled me to carry on the work of the institution and to the employes for their willing assistance

Very respectfully,

MISS EDITH RILEY,

Superintendent.

ANNUAL REPORT
OF THE
Division of Child Hygiene

ANNUAL REPORT
OF THE
Division of Child Hygiene
DEPARTMENT OF HEALTH.

*Mr. David D. Chandler, Secretary, Department of Health,
Plane and William Streets, City*

DEAR SIR I herewith respectfully submit the report of
the Division of Child Hygiene for the year 1914.

Respectfully submitted,

JULIUS LEVY,
Director Division Child Hygiene.

DIVISION OF CHILD HYGIENE

The supervision of new born babies and the education of mothers in Child Hygiene is the central feature of the work; this work has been cornered to part of the First and Third Wards.

ORGANIZATION AND SCOPE

- . Director
- 1 Stenographer
- . Clinic Physician
- . Teachers of Infant Hygiene
- 1 Central Office
- 3 Consultation Stations in Public Schools

Appropriation \$ 6,000 00

EXPENSES

Administration—

Director	\$	1,000 00	
Stenographer		700 00	
Rent		2,000 00	
Telephone		800 00	
Stationery		100 00	
Postage		50 00	
Records		90 76	
Office Equipment		182 00	
Supervisor Midwives (1½ months)		105 00	\$ 2,790 91

Education of Mothers and Supervision of Babies—

Literature	\$	110 00	
Stationery, Postage and Printing		291 97	
Nurses		2,340 00	
Physician		300 00	
Equipment in Schools		100 00	3,141 97
			\$ 5,941 98

Members of Little Mothers' League	9
Expectant Mothers Instructed	52
Number of Babies Supervised	1,749
Number of Visits to Consultation Stations.....	2,554
Number of Visits by Nurses.....	5,161
Number of Deaths under one year of age among babies supervised	11
Death rate among babies supervised.. . . .	1.1%
Infant Mortality Rate for entire City.....	9.8%
Report of Unhygienic and Unsanitary Conditions made to Tenement House Commission, Building Department, Health Department	71
Reports of Desertion, Unemployment and Poverty made to Bureau of Associated Charities, United Hebrew Charities' Overseer of the Poor.....	80
Unmarried Mothers and Babies Referred by City Hospital, Children's Aid Society, Bureau of Associated Charities	27
Mother and Baby separated.	3
Mother and Baby not separated	24
Kept by Relatives	17
At Service	2
Sent to Florence Crittenton Home	5
Pumped Breast Milk Supplied	5
Wet Nurses	2

Boarded-out Babies

Baby Farms closed.....	3
Applications	40
Homes investigated	49
Homes accepted	20
Number of Boarded-out Babies supervised.....	1

Midwifery Practice (See Body of Report).

Midwives Licensed	82
Midwives Not Licensed.	17

Questions Considered in Report.

Birth Registration	Clinics for Whooping Cough
Care of Expectant Mothers	Boarding-out of Babies
Obstetrical Care	Unmarried and Destitute Mothers
Midwifery Practice	Wet Nurse Directory
Breathing Spaces in Congested Blocks	"Baby Milk"
Hospitals for Measles	

BIRTHS BY WARDS, 1914.

WARDS.	BIRTHS	WARDS.	BIRTHS.
1	1,263	9.....	518
2	311	10....	754
3	1,232	11.	385
4	260	12....	698
5	918	13.....	858
6	417	14.....	1,192
7	481	15.....	421
8	470	16 ..	715

214 out-of-town births and address unknown not included.

NEWARK IN THE NEXT GENERATION

Births in 1914 by Nativity of Mother.

NATIVITY OF MOTHER.	BIRTHS.	PROPORTION OF TOTAL.
United States	4,402	39%
Italy	2,625	23%
Austria-Hungary .	1,539	13%
Russia	1,535	13%
Germany	345	3%
Ireland	307	2%
England	14	1%
Others ..	100	1%

TOTAL NUMBER OF BIRTHS BY MONTHS FOR THE YEAR.

MONTHS.	BIRTHS.	MONTHS.	BIRTHS
January	924	August	1,043
February	864	September	902
March	965	October	904
April ..	855	November	889
May ..	897	December	920
June ..	956		
July ..	988	Total Births.....	11,107

The Birth curve is very similar to the Death curve under one year, August showing the highest point. In 1914 the high points in July and August death curves are partly explained by the high points in the birth curve.

BIRTHS BY WARDS AND NATIVITY OF MOTHERS

WARDS	United States	Italy	Russia	Austria	Germany	England	Ireland	Others	Total
1st	284	890	13	12	7	18	24	15	1,263
2d	187	17	22	18	11	5	6	15	311
3d	244	52	177	413	11	8	9	18	1,232
4th	129	66	19	9	6	9	18	4	260
5th	229	217	212	219	10	5	17	9	918
6th	257	17	21	33	15	7	26	11	417
7th	163	141	69	63	7	2	21	15	481
8th	291	114	16	8	8	16	13	4	470
9th	345	34	30	35	17	23	19	15	518
10th	170	332	84	122	17	8	13	8	754
11th	261	48	22	9	13	12	15	5	385
12th	207	13	147	222	42	9	53	5	698
13th	526	45	81	79	71	26	26	4	858
14th	297	442	280	197	36	10	5	5	1,192
15th	236	88	12	18	13	13	29	12	421
16th	448	27	84	66	53	14	11	12	715
Totals	4,274	2,603	1,509	1,523	337	185	305	157	10,893

214 births out of town and address unknown not included in total

TOTAL NUMBER OF BIRTHS BY ATTENDANT FOR EACH
MONTH AND ENTIRE YEAR

MONTHS	Midwife	Physician	Hospital
January	462	366	96
February	413	340	111
March	466	406	93
April	428	326	101
May	420	372	105
June	424	419	113
July	519	353	116
August	502	432	109
September	486	318	98
October	440	345	119
November	439	332	118
December	472	343	105
Totals	5,471	4,352	1,284

MIDWIVES ATTEND MORE BIRTHS THAN PHYSICIANS

Total Births	Midwife	Physician	Hospital	Proportion by Midwives
11,107	5,471	4,352	1,284	49%

MIDWIVES ATTEND ABOUT ONE FOURTH OF THE
BIRTHS OF NATIVE BORN WOMEN

NATIVITY OF MOTHER	Midwife	Physician	Hospital	Proportion by Midwives
Ireland	58	182	67	18%
England	38	117	39	14%
United States	982	855	385	22%
Germany	136	150	59	40%
Russia	803	531	201	52%
Austria-Hungary	1,137	260	112	71%
Italy	2,267	206	152	86%
Others	50	71	39	35%
Totals	5,471	4,352	1,284	49%

ILLEGITIMATE BIRTHS BY WARDS AND NATIVITY OF MOTHER

WARDS	United States	Italy	Russia	Ireland	England	Austria	Germany	Total
1st	21	4	1	1	2		1	30
2d	7		1	1				9
3d	4	2	6	1		4	1	18
4th	6	1						7
5th	6		4			2	1	13
6th	3							3
7th	7				1	2		10
8th	6							6
9th	7		1	3	1			12
10th	3		1					6
11th	3		1					4
12th	3		1	1	1	3		9
13th	4							4
14th	5		2	1		3		11
15th	6							6
16th	3			1				4
Totals	96	7	18	9	5	10	3	152

Non-residents, 10.

*Florence Crittenton Home

Other institutions, all births distributed by home address

Illegitimate births, 162

Illegitimate deaths, 17.

Infant mortality rate, 105

INFANT MORTALITY RATES 1910 1914

AND

DEATHS UNDER ONE YEAR, 1910 1914

YEAR	* Rate	Number of Deaths Under One Year
1910	123	1,232
1911	113	1,062
1912	103	1,103
1913	93	999
1914	98	1,122

*Rates before 1914 were made by including in births for year all old births reported in that year

DEATHS UNDER ONE YEAR FOR YEAR 1914.

BY CAUSES.

Early Infancy

Congenital Debility Icterus and Sclerema	56
Premature Birth	190
Atrophy Marasmus, etc.	69
Congenital Malformations	18
Injuries at Birth.....	29
Other Causes peculiar to early infancy	79
Syphilis	14

Diseases of Digestive System.

Acute Gastro-Intestinal Diseases.	311
All others	13

Diseases of Respiratory System

Acute Bronchitis .	40
Pneumonia .	182
Others (Tuberculosis excepted)	11

GENERAL DISEASES.

Contagious

Measles	11
Pertussis ..	11
Scarlet Fever ..	9
Diphtheria	4
Others	6

Tuberculosis

Meningeal	6
All others not listed elsewhere	19

Diseases of Nervous System.

Meningitis, simple	7
Cerebro-Spinal Meningitis .	12
Convulsions	29
Other Diseases of Nervous System	2

Total Deaths	1122
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DEATHS UNDER ONE YEAR, ONE MONTH AND STILL-
BIRTHS, BY MONTHS

MONTHS	Under One Year	Under One Month	Still Births
January	85	39	50
February	84	44	21
March	97	45	44
April	80	32	19
May	83	33	30
June	69	37	39
July	129	34	35
August	131	30	51
September	96	36	39
October	98	45	34
November	69	34	43
December	101	48	41
Totals	1,122	457	450

INFANT MORTALITY RATE BY NATIVITY OF MOTHER,
1914

NATIVITY OF MOTHER.	INFANT MORTALITY RATE
Austria	131
United States	111
Italy	88
Russia	63
Others	96
Entire City	98

INFANT MORTALITY RATE BY WARDS

WARD	Rate	WARD	Rate
*First	88	Ninth	59
Second	144	Tenth	124
*Third	80	Eleventh	88
Fourth	146	Twelfth	126
Fifth	108	Thirteenth	83
Sixth	88	Fourteenth	87
Seventh	145	Fifteenth	102
Eighth	96	Sixteenth	85

*The two most congested wards in the City where intensive work of Division has been carried on

UNREPORTED BIRTHS FOR YEAR 1914 BY WARDS

WARD	Unreported Births	WARD	Unreported Births
First	40	Ninth	9
Second	8	Tenth	27
Third	32	Eleventh	2
Fourth	6	Twelfth	20
Fifth	25	Thirteenth	13
Sixth	4	Fourteenth	25
Seventh	23	Fifteenth	6
Eighth	5	Sixteenth	8

These unreported births were discovered by following up deaths under one year of age; among 1,122 such deaths 253 had not been reported as births.

AGES OF INFANTS AT FIRST VISIT TO CONSULTATION STATIONS 1914.

—Weeks—															Total
1-2	2-3	3-4	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-40	40-46	46-48	48-48		
14	56	91	256	140	60	109	58	34	45	31	39	23	24	974	

16% made First Visit under one month of age

40% made First Visit under three months of age.

This is the result of our method of visiting the homes from birth records, which places the infants under our care at the ages of greatest relative mortality

EFFECT OF SUPERVISION ON CHARACTER OF FEEDING 1914

	FIRST VISIT TO CONSULTATION STATION.	ONE MONTH LATER
Breast Fed entirely.....	148	464
Breast Fed partially.....	364	158
Artificially Fed	186	76

	FIRST VISIT.	ONE MONTH LATER
Breast Fed	74%	90%
Artificially	26%	10%
Breast Fed entirely.....	23%	66%
Breast Fed partially.....	51%	24%

This table explains to a large degree the low death rate among supervised babies and the difference in the Infant Mortality rates in Wards 1 and 3 and Wards 5, 10 and 12, as shown in Table No. 17

PRENATAL AND PROPER OBSTETRICAL CARE WOULD HAVE PREVENTED MANY OF THESE DEATHS IN 1914

Still Births	450
Deaths under one month of age	457
Congenital Debility, etc	48
Premature Birth	181
Atrophy Marasmus, etc	2
Congenital Malformation	12
Injuries at birth	26
Other causes peculiar to early infancy..	50
Syphilis	6

INFANT MORTALITY RATES IN CITIES OF NEW JERSEY 1912.

State of New Jersey..... 124

CITIES.	INFANT	CITIES.	INFANT
	MORTALITY		MORTALITY
	RATE.		RATE.
*Newark	103	Morristown .	106
Trenton	130	Camden .	118
Jersey City	133	Burlington .	177
Bridgeton	149	Elizabeth ..	182
Paterson	161	New Brunswick.	182
Perth Amboy	161	Phillipsburg .	204
Harrisburg	165	Roosevelt	260

* In 1914 reduced to 98

A COMPARISON

BETWEEN

WARDS
1 and 3
2,495 Births

WARDS
5, 10 and 12.
2,370 Births

SIMILAR

IN

Nativity, Congestion, Poverty, Ignorance.

DIFFERENCE.

Intensive Work
by
Division of Child Hygiene

No Supervision.

RESULTS

Infant Mortality Rate, 84	Infant Mortality Rate, 118
84 Lives Saved.	80 Lives Sacrificed
Sickness Prevented.	How much Sickness?
Maternal Nursing Continued.	How much Grief?

COST

\$4,000 for Prevention.

\$4,000 for Funerals

Appropriation limited the work to 1st and 3rd wards.

The greatest single factor in Infant Mortality is ignorance. Education of mothers is the most important and permanent instrument for the conservation of child life and child welfare.

Education is of fundamental importance in public health, just as health is recognized to be of basic importance to education. In a recent bulletin of the United States Bureau of Education, Doctor John A. Ferrell, Assistant Director of the International Health Commission, says:—

"We now know that it is of fundamental consequence in any effective system of schooling, that the child be received into the school, a normal, healthy animal. With better health and consequent greater efficiency we shall be able to secure with comparative ease the additional elements necessary to the highest standards in our educational system."

The first year of life, with its rapid growth and development, determines to a large degree the health, resistance, and vigor of later years; we cannot, therefore, give too much time, thought, or money to those measures that will increase the efficiency of motherhood and safeguard the child during this critical period.

The art and science of mothercraft is a simple one, but on account of the many prejudices, superstitions, and false notions with which the minds of mothers are filled, it is a difficult one to teach. Our experience has strengthened our position that this can be successfully done only by physicians and Teachers of Infant Hygiene who speak the language of the mothers, are familiar with their customs, and possess an unusual degree of enthusiasm and aptitude. While exhibits, literature and press notices can increase the

receptiveness of the mothers, ready constructive and educational work is only accomplished by continued personal contact and supervision.

The central thought in all our teaching has been that maternal nursing is the only proper feeding for a baby under nine months, that it is of immense importance to the mother and baby that it be so fed, and that if social and economic difficulties are overcome, it is always possible, or so nearly always possible, that the exceptions are negligible in a large program. Thus, in addition to the importance of regular intervals of feeding has been the keynote of our work, and has produced wonderful results.

Many mothers have continued nursing longer than with previous babies, many have discontinued bottle feeding entirely, many have at least, if maternal nursing was found to be insufficient given only a few bottles, instead of discontinuing maternal nursing. Many mothers never bathed their babies and urged to do so by our workers. Mothers have learned how to dress their babies so as to add to the comfort and warmth, to keep them in the fresh air day and night, winter and summer, and to do the many things that create the well, happy, thriving baby from the puny, sickly infant. The mothers have learned to recognize the first signs of illness and what to do while waiting for the doctor. In short, they have learned in therapeutics, the most important and neglected specialty in the science of life.

This work has been carried on in the two wards of the City where we had the greatest number of infant deaths, the most congested foreign population, the greatest degree of ignorance and poverty. Our work has been restricted to these narrow confines by the amount of money heretofore appropriated for this purpose. In the First Ward we are covering about one-third of the ward, and even there our worker has over 200 babies on her list. In the First Ward

we have one Consultation Station, and in the Third Ward two Consultation Stations. Our stations are designated Consultation Stations properly, since they give nothing but advice. Modified milk is not distributed, and we object even to the name milk station, as it draws attention to artificial feeding, which, through the kind of work we are doing, can be largely prevented. Many Departments in other Cities who have started with milk stations have given them up, because they felt that they were not preventing conditions, merely applying palliatives, and, secondly, because they thought that in some instances a milk station has the same effect on the community as a saloon—it increases the number who think they need it.

To these Stations the mothers bring their babies to be weighed, and to be examined by the doctor, and here they receive instructions in Infant Hygiene.

The Teacher of Infant Hygiene visits the home of every baby born in the district, if it has been delivered by a midwife or in a hospital, just as soon as she receives the record. As I explain elsewhere, this, at present, is much later than it should be if we would start all the babies in the right way. With the large number at present on the visiting list, the nurse reaches each home about once in six or eight weeks. This is not frequent enough, and will be changed as soon as we have more workers. At the same time she is to advise expectant mothers to report to a doctor or clinic for examination and instruct them in personal hygiene, to report to this department all bad housing and unsanitary conditions in the street, yard, or house, and call our attention to social and economic conditions that interfere with the baby's welfare or prevent the mother from nursing her baby.

All these elements are intimately bound up with our problem, and though we have succeeded in remedying, im-

proving and correcting many of these conditions. I am convinced that the community and the City Government will have to prevent or correct many housing, sanitary, and economic conditions before we can guarantee to our little ones that degree of physical well being essential to physical, mental or moral efficiency.

We have distributed 2,000 copies of a book entitled "The Child," 10,000 leaflets on the "Summer Care of the Baby," and 14,000 leaflets on the "Winter Care of the Baby." Lectures were given with moving pictures entitled "The Care of Babies," "The Fly Pest," "The Man that Learned." I would recommend that we obtain the two latter films and have them displayed throughout the City as often as possible. As I own the other film, I would be glad to donate it for this purpose.

I am preparing an exhibit that will forcefully represent the fundamental facts of Infant Hygiene. This should be shown at the Library and then moved to the different neighborhood centres. The wording will also be prepared in different languages so that all nationalities can obtain the benefit of it. These pictures can then be photographed and with a little descriptive matter form a most interesting and convincing primer in Infant Hygiene.

I have also prepared for printing a pamphlet in simple language on "Prenatal Care," telling the expectant mothers only those things necessary to safeguard their health and that of the baby.

At the beginning of the Summer and Winter I suggest that we distribute again special leaflets, printed in the various languages.

A very interesting development in the field of education of Infant Hygiene has been the work done with "Little Mothers' Leagues." This received its great impetus in New

York from Doctor Josephine Baker, and has been adopted by most Child Hygiene Departments. It was started to give information to the girls of nine to sixteen years who so often among the poor play the role of mother to their little brothers and sisters. It has proved to be very interesting to the girls, and a most important factor in the reduction of Infant Mortality. We conducted a class in the Montgomery Street School for two years, but had to discontinue on account of other activities. Just as soon as we have the necessary workers, this work will be developed in every neighborhood, and efforts made to co-ordinate it with the Domestic Science courses of the schools. This is being done in Philadelphia now, and will prove most valuable to the girls, their mothers, and future generations. To meet the needs of other women who are well educated in all things but the care of babies, classes could be organized by Women's Clubs, Social Workers, Teachers, and all those who deal with mothers and children. This Department will be glad to arrange for lecture courses and demonstrations in the stations, or help in any way to start a school for mothercraft.

PRENATAL CARE.

We are learning that this is the most valuable of all our efforts. Only through efforts wisely directed before the birth of the baby can we lessen the awful mortality of the early days and weeks. In 1914 in Newark 457, more than one-third of all deaths under one year, occurred in the first month, and one-seventh occurred in the first week, 450 still births were reported, and according to estimates at least 11,000 abortions, accidental and criminal, occur each year. What an awful destruction of life! And can you doubt that all the conditions that produce these deaths also affect the succeeding births or those that survive?

Under the subject of prenatal care I include the question of obstetrical care and midwifery practice, for only through advice given before the birth can we influence these factors.

To prevent unnecessary abortions, miscarriages, still births, eclampsia, death from puerperal sepsis, accidents of labor, toxemias of pregnancy, cracked nipples, breast abscesses, early and unnecessary weaning, we need:

PREGNANCY CLINICS, where women, particularly those who are going to be confined by midwives, will be examined and advised if they need hospital or doctors care. The nurse can follow up these women, instruct them in personal hygiene, see that the women follow the orders of the doctor and report regularly for examinations, learn to help preparing the family life, and to adjust economic and social conditions for the new guest.

In 1914 49% of our women were confined by midwives, 11% in hospitals. At present these women receive, practically speaking, no examination during pregnancy, no advice in personal hygiene, no supervision. The importance of these factors in preventing accidents of pregnancy and labor, miscarriages, still births, premature births, and early weaning, can be gathered from the following facts. In Boston the rate of still births was 4% per 1,000 living births, among supervised mothers 28, in New York, 47.5, and among supervised mothers 37.8. In New York the deaths under one month have been reduced one-half among 500 supervised mothers. Remembering that in Newark in 1914 457 babies died under one month and that there were 450 still births we see how necessary is this work if we are to prevent these deaths. Secondly, we need an

GYNASTRICAL OUTPATIENT DEPARTMENT. Many women desired to be confined by doctors, but cannot afford it, and still cannot or do not wish to go to a hospital. Moreover, it is cheaper for the City to have such women confined at

home, when one considers, in addition to maintenance, the cost of the institution, and that the removal of the mother from the home is bound up with grave dangers to all members of the family.

Arrangements could be made with young practitioners or the internes of a hospital, in conjunction with the Visiting Nurses' Association or our own undergraduate staff, with proper supervision, to supply obstetrical care in the home. A very large number of families who are now engaging midwives would be glad to pay for such service. Maternity hospitals could then be used for difficult or special labor cases only. This plan would supply properly supervised obstetrical care to cases of all classes and would save the lives of many mothers and babies, prevent much chronic invalidism in women, now so common after confinements, and guarantee to the coming generation greater health, vigor, and happiness. Prenatal and obstetrical care is the real foundation of a constructive, prophylactic Child Hygiene program.

MIDWIFERY PROBLEM In Newark, *midwives deliver over 5,000 women each year, about one-half of the total births, and in certain classes and neighborhoods, midwives deliver all the women, set the standards of obstetrical practice and often are the only advisers in the care given to the baby and mother.*

In November, 1914, the Board of Health authorized our engaging a Supervisor of Midwives to investigate Midwifery practice in Newark, for the purpose of ascertaining if continuous and active supervision is desirable.

The results of this investigation were as follows

99 Midwives in Active practice.

82 Midwives are licensed.

17 practicing without a license from the State of New Jersey

15 unlicensed Midwives hold a diploma from some school of Midwifery.

30 Midwives have reported births late.

20 Midwives failed to report births.

20 Midwives admitted that they do not use Silver Nitrate for the eyes of new born babies.

40 Midwives carried drugs forbidden by law, such as quinine, laudanum, cornutol (an advertised abortifacient), arsenic, strychnine, iron.

16 Midwives carried, contrary to law, instruments such as hypodermic syringes, uterine forceps, hard rubber catheters and speculum.

27 were recorded as dirty in regard to their person, home or bag.

70 do not send for a physician when confronted with abnormalities in mother or baby, as required by law.

25 do not carry thermometers.

5 Midwives advertise in the press.

13 Midwives are suspected of being abortionists.

3 Midwives deliver more than 20 births a month.

2 Midwives deliver more than 30 births a month.

1 Midwife delivers more than 40 births a month.

Of the 60 Midwives 10 delivered more than 50% of all the cases.

49% of all the births in the City in 1914 were delivered by Midwives.

This investigation shows that the majority of midwives are willing, careful and desirous of conforming to the law and of rendering good service to their patients, that some break every article of the midwifery law of the State, from not reporting births to performing abortions, that they all have a profound respect for the Department of Health and its legal resources to enforce the law, and that the practice of midwifery will be on as high or low a level as we permit it to be. If the Board will make it clear that we

are authorized to enforce the law without favor, education and gentle persuasion will be sufficient to induce every midwife to conform to it. The education and supervision of midwives is essential to our work:—

1—To obtain proper obstetrical care for mothers.

2—To prevent malpractice.

3—To have the midwives act as teachers to the 5,000 women confined yearly by them.

At the present time our attitude towards midwifery practice is to bring it to as high a level of efficiency as possible, and at the same time, recognizing the limitations caused by lack of general training, to make it possible for every woman to have proper medical attendance during pregnancy and at labor, and to encourage them to obtain this better care. With our present knowledge of midwifery practice in Newark we cannot ignore it, nor have we the power to eliminate it, if we were so disposed. The following suggestions are made, therefore, to enable us to safeguard the health and life of our mothers and babies, as influenced by obstetrical care:—

1—Only those midwives be permitted to practice who have a license.

2—Every midwife be required to register with this Department.

3—The Midwifery Law as passed by the Legislature of 1910 be rigorously enforced.

This law is so broad that if the quality of her work requires it, we can compel a midwife to take post graduate work in hospitals or to stop practicing.)

4—That this department forbid every midwife to deliver or have delivered in her home more than one birth within a period of six months.

c. That the Board establish Pregnancy Clinics in the congested neighborhoods in connection with children's clinics, where such facilities do not already exist within each reach of the neighborhood.

d.—That an Out Patient Department be established whereby the needy can obtain medical attendance in confinement at home.

BABY FARMS BOARDING OUT OF BABIES. ILLEGITIMATE BABIES AND DESTITUTE MOTHERS

At present anyone who wishes may take babies to board, and take as many as he or she wishes, and, if such acts as are chargeable as cruelty or neglect are avoided, we are without power to interfere, even though we know from every statistical analysis and individual experience that babies so boarded do not receive proper care and usually die. Our records show that during the past year about 300 women have applied to take babies and children to board; that this is usually done by very poor and oftenensely ignorant and incompetent women as a last resource to obtain money for sustenance, and that the babies are taken in large numbers and kept in filthy and overcrowded quarters. One woman had seven babies under six months of age in one attic room. One colored woman had eleven white and black children herded together, several of whom showed marked evidences of disease and neglect. Leaving aside for a moment every humanitarian instinct that would call upon us to guarantee proper care to the waif, the foundling and the illegitimate child, Newark cannot afford to leave these infants and children without proper supervision, if only for its own protection, for they very easily

become a source of expense to the City. They are often deserted, and then become a public charge; also they readily become hospital cases, for the boarding home sends them to the hospital just as soon as they are ill, especially if it is thought that they are going to die.

A proper system of licensing and supervision will permit those who are fit and have proper home surroundings to take children to board, and will assure to these babies proper care and feeding during this important period of infancy.

This procedure would protect the babies that must be boarded out. But many babies are boarded out for insufficient reasons, and it is to the interest of the City to prevent this. If the child is illegitimate, the whole future welfare of the mother and baby require that they be kept together, to guarantee maternal nursing to the baby, and to the mother the development of mother love, and a sense of responsibility.

To carry out our plan we need, first, a home for destitute mothers, where they can be placed till we have had sufficient time to study their circumstances, to segregate the feeble-minded, to teach them the proper care of themselves and their babies and to decide just what should be done to enable them to become self-supporting.

For this purpose it has been suggested that a wing of the Alms House, to be designated "Convalescent Home for Mothers," be set aside and some arrangement be effected between the Alms Department and this Board that will place this work under the control of this Department. The report of the Catholic Children's Aid Society states that such a wing has been set aside for this purpose.

The Boarding-out problem is thus only a phase of the problem of the destitute and unmarried mother, and we shall have taken a long step forward when the welfare of the baby determines our attitude towards the mother.

WET NURSES.

This home could also act as a directory for wet nurses. Many premature, marasmic babies can be saved and brought back to health and vigor if breast milk can be supplied to them. Many families would be glad to pay from \$25 to \$40 per month to a wet nurse, at the same time allowing her to keep her baby with her and nurse it. The following rules should be established to safeguard the interests of the wet nurse and both babies:—

1 The wet nurse must be free from disease, as shown by a Wassermann test, tuberculin test, a smear, and physical examination.

2 She must have a healthy baby that is gaining regularly.

3—Wherever she goes as a wet nurse she must be permitted to take her own baby with her and nurse it.

In Boston, where this method has been employed for three years, very fine results have been obtained, many unmarried or destitute mothers have saved several hundred dollars, saved the lives of many babies, and remained permanently in the family employ, obtained satisfactory service elsewhere with their children, or married and maintained a fine family life. We have started this plan with the Florence Crittendon Home, sent out two wet nurses, supplied pumped breast milk to five premature or atrophic babies.

MILK

The Division of Child Hygiene naturally is interested in the milk that is given to the baby, since milk remains the main article of diet till the third year and is one possible cause of Tbc, Diphtheria, Scarlet Fever, Typhoid and

Diarrhoea. I wish to recommend that whatever else may be done the board immediately attempt to make available a proper milk supply for infants and children. There are at least a dozen dairies within easy distance of Newark that, with active supervision, advice, and encouragement, could bring into Newark a milk properly refrigerated and delivered within twenty four hours, at 10c per quart, coming from clean dairies and from tuberculin tested and clean cows, which would have a bacteria count under 30,000 bacteria per CC. Through publicity this Department would quickly have mothers buying only the best milk for their babies, particularly if a special permit were granted allowing this milk to be designated as "Babies' Milk." This should be granted only to dairies scoring 75 or over and strictly conforming to all rules laid down. That would settle to a large degree the milk question for those dependent on milk and most easily affected by it. The general milk supply is another question and is not the immediate concern of this Division of the Department.

DISPENSARIES FOR CHILDREN MEASLES AND PERTUSSIS.

Our work has revealed the need for dispensaries for children's diseases, special clinics for whoopingcough, and hospital provision for complicated and severe cases of measles and pertussis.

The children of the poor often do not receive any medical attention because clinics are not close at hand and the busy mother cannot or will not go long distances. Whoopingcough is very common, the cause of a great deal of sickness and death, and often goes without any medical attendance or any attempt at isolation. These clinics are urgently

needed in wards One, Five, Twelve, Ten and Fourteen. In 1914 eleven deaths were recorded under one year from whoopingcough and eleven from measles, but only two from scarlet fever and two from typhtheria. To-day no institution will take a case of whoopingcough or measles even if complicated by pneumonia or urgently requiring hospital care. If we would reduce the number of cases and give proper care to the serious one, some hospital provision must be made.

DAY NURSERIES.

These should be registered, so that the Department may be sure that where so many children congregat proper care is exercised in the prevention of contagious disease. An occasional visit and suggestion will, I know, be appreciated by the superintendents in regard to rest, air, diet and other questions of infant care.

Day nurseries and foundling institutions should be discouraged from accepting nursing babies. This Department firmly believes that though they temporarily relieve, by enabling the mother to go to work, some economic difficulties, they only increase the later troubles of the child and mother.

The following rules should be established for their guidance and hung up in each nursery:—

1. An isolation room for cases of suspected contagious disease should be provided.

2. Each child ought to be inspected on admission and if suspicious signs of contagious disease are noted the child should be placed in the isolation room and kept entirely apart from the other children, and the Department of Health should be notified at once.

3—All rooms devoted to nursery or kindergarten purposes should be above the street level, unless there is a cellar underneath the room so occupied.

4—The premises should at all times be kept in a clean and sanitary condition. Dry dusting or sweeping is harmful.

5—Adequate ventilation, lighting, and heating should be provided. Except in extremely cold weather, adequate ventilation should be maintained by means of open windows.

6—A well-ventilated room for children's outer garments should be provided. In this room the clothing removed from the children in the morning should be placed.

7—A minimum of 200 cubic feet of air space for each child should be provided.

8—Each iron bed or crib should be placed so that there will be a space of two feet on all sides except where the head or sides of the bed or crib may touch the wall.

9—Woven wire springs should be provided, over which a folded blanket, protected by rubber or oilcloth sheeting, should be placed. Mattresses should not be used.

10—The use of common wash cloths, towels, combs, and hair brushes is prohibited.

11—All diapers that have become soiled during the day should be immediately placed in water and thereafter thoroughly washed and boiled. No diapers in an unclean condition should be removed from the premises.

12—Unless the clothing worn by a child is thoroughly clean on admission, a suitable over apron (the property of the day nursery) should be worn through the day, and each individual apron should be marked for identification, unless a clean apron is provided daily.

13—Adequate care should be taken of the milk, bottles, and nipples used in infant feeding.

14—No more children should be admitted daily than can be properly cared for.

VITAL STATISTICS.

In March, 1914, there were 924 births reported, of which 28% or 31%, were reported after the five-day limit allowed by law. Fifty-eight physicians reported 152 cases late and 38 midwives reported 135 cases late, while 406 births were reported by physicians and 416 births were reported by midwives. By following the reports of all deaths under one year of age we were able to find 253 unreported births, of which 174 occurred in 1914 and 79 in 1913.

Our records show that 44 midwives and 16 physicians failed to report births, and that one physician is regularly reporting births for an unlicensed midwife, even though he does not attend and usually does not even see the patient at any time.

Among 815 birth records examined 173 gave wrong addresses and were inaccurate or incomplete in other particulars.

Since 1914, the Registrar, at our suggestion, has requested all hospitals to give the home address of all women delivered in hospitals, so that the births could be distributed by wards and visits made, if desired, on their return.

This has been followed by all but one private hospital. Since the birth records are received now by the City Clerk, there is naturally some delay in our receiving them, as we have to copy them three times a week. Prompt reporting of births is very important to insure complete returns and to enable us to visit mothers in the congested neighborhoods before the early Infant Mortality has become effective. Often we have visited after receiving a birth record three weeks late, and have found the baby suffering from some preventable disease, or artificially fed, or dead. If the present law is enforced, requiring all reports to be made within five days, a great deal can be accomplished in accuracy and completeness.

Since we are now following only the births attended by hospitals or midwives, I should like to see these reported within twenty-four hours. This is now required in England by what is known as the Notification Act. Only the name, date, and address is required in this initial report. The rest of the data can be sent later or obtained by the nurse who visits the home. This later plan is followed in Boston and has many things to recommend it; it insures uniformity and accuracy in the reports, easily permits of obtaining additional data, gives an easy approach to every family, and allows the nurse to determine if any special supervision is needed.

We have established a system of filing births and deaths under one year that lends itself to a rapid analysis of the City's vital statistics and graphic representation of facts deduced from them. It enables us to tell if midwives are confining births in their homes, if deaths have been reported as births, etc. It may be found practicable to adopt this system for our whole vital statistics, each department consulting the records for its special purpose.

SOCIAL AND ECONOMIC CONDITIONS

Homér Folks, President of the American Association for the Study and Prevention of Infant Mortality, has referred rather satirically to our efforts to reduce Infant Mortality or safeguard the health of infants by making recommendations that poor people cannot follow.

We write that a child must have 200 cu. ft. and an adult 400 cu. ft. of air space and then permit 5 persons to eat, sleep, and live in one room, or 8 persons in 2 rooms, as my records show many families are living in the congested neighborhoods.

We have beautiful parks on the outskirts of the City, but no little breathing spaces right in the centre of congested blocks. We issue convincing literature and instructions that a baby must be breast fed, and then allow lack of nourishment, illegitimacy, desertion, unemployment to rob the baby of its one inalienable right, and allow the baby to be placed in a baby farm, in the Alms House, or in an Infant Asylum, and the mothers in the factory. We tell mothers what they should eat to have healthy babies, or to nurse their babies, and then, if the husband is out of work we let them go without it. Syphilis is the cause of at least one-third of the still births and a large number of early deaths. Alcoholism lowers resistance, and decreases the number of the breast fed.

The infant mortality problem is bound up with all these problems of bad housing, congestion, poor sanitation, social and economic maladjustments. To meet this phase of this problem, which might be considered outside the immediate province of this Board, but an integral part of the problems confronting this Division, I would suggest that an Advisory Council be formed to whom I can refer these questions as they arise, in the hope that through their advice and an enlightened Public Opinion and Conscience, our babies will come into the world with strong bodies and normal minds and have safeguarded to them the right to be well born, to be well cared for at birth, and well nourished and protected after birth.

Newark Weather in the Year 1914

NEWARK WEATHER 1914

Mr David D Chandler, Health Officer, Newark, N. J.

DEAR SIR I herewith submit the following report for the year 1914.

A cold, dark day opened the New Year. Snow flurries on the second day of the year were followed by rain and small snow falls on the third, fourth, and fifth of January. Clear, mild weather then began and lasted until January 15, on which one inch of snow fell. This was the first heavy snow of 1915. January 27 and 28 had heavy fogs. The month closed with a rainfall of 1.80 inches. Only twelve days of January were clear. The highest temperature (58 degrees) occurred on January 20; the lowest (5 degrees below zero) on January 14. There was a rainfall of 6.15 inches and a snowfall of 1.6 inches.

Five mild, fairly clear days opened February. The sixth and seventh were the only rainy days. Snow fell on eight other stormy days. A blizzard, with twelve inches of snow and a cold wave, marked February 13 and 14. The thermometer dropped to two degrees below zero, while the wind reached a velocity of thirty-two miles per hour. Five inches of snow fell on February 16, two inches on February 17, one and one-half inches on February 19, two inches on February 23. Lunar halos occurred on February 7, 8 and 11. Fog and haze marked February 26 and 28. "Ground Hog Day," February 2, was bright and sunny. Lincoln's and Washington's Birthdays were fine, clear and cold days. The highest temperature (56 degrees) came on

February 27 the lowest -12 degrees below zero on the 12th and 13th of February. 23.25 inches of snow are to be credited to February.

March set the pace for spring with an eight inch, blizzard-like snow storm. Railroad traffic was paralyzed and wires were down in many sections of the City and State. On March 6 there was a snowfall of two inches. A fall of 6 inch of snow on March 18 was followed by the last snow, 2 inches in depth, on March 21. A partial and nearly total eclipse of the moon, March 11, about 11:13 P. M., was an interesting visible astronomical event. On March 12 a beautiful lunar halo was in evidence. St. Patrick's Day was cloudy in the morning, but bright sunshine shone in the afternoon. 10.80 inches of snow fell during the month. The total rain and melted snow was less than normal, 3.27 inches. The maximum temperature 73 degrees registered itself on March 27, the minimum temperature -12 degrees occurred on March 2.

Gentle showers fell on April 1, 5, 7, 8, 15, 16, 20, 22, 25, 28, and 30. The storm of April 15 was accompanied by a wind with a velocity of 35 miles per hour. There were only 13 clear days during the month. 83 degrees on April 19 was the high temperature mark of the month, 2 degrees, the low temperature record. There was a total rain fall of 4.09 inches.

Balmy May began with four clear days. There were only nine days on which showers or rain occurred. 3.13 inches was the total fall. A temperature register of 96 degrees at 2.30 P. M. on May 27 was the highest record for any May day. At three o'clock of that day it grew very dark. Lightning, thunder, hail and a 35-mile-per-hour gale broke the hot spell. The lowest temperature of the month, 34 degrees, was noted on May 1. 3.13 inches of rain, less than the normal amount, fell during May. Seventeen clear days were radiant with sunshine.

The June weather play began with three bright days. Though there were eleven days on which it rained more or less, only 2.35 inches of rain were recorded for the month. Six of the storms were distinguished by thunder and lightning and wind. On June 25 the thermometer reached 95 degrees the highest point for the month; 48 degrees, on June 25, was the low point reached by the mercury. Twelve clear days occurred in June.

July, it seemed, wished to balance the small amount of rain of June by ushering in the first two days with a total rainfall of 2.81 inches. During eighteen days 7.39 inches of rain came during this month, with its more or less muggy conditions.

Fourth of July was a fine, clear day. July 9 and 10 were filled with haze and were followed by a storm with thunder and lightning, and a fall of a half to three quarters of an inch in diameter on July 11. A thunder storm on July 17 reduced the temperature from 92 degrees to 76 degrees, about, during the storm, but could not hold it from again reaching 81 degrees about nine o'clock. Eighteen days of the month had rains, the total fall of which was 7.39 inches. There were only seven clear days in July. July 23 had a maximum temperature of 95 degrees, July 31, 56 degrees.

August began with a clear day. The hottest day of the summer occurred on August 19, when the thermometer marked 97.5 degrees as its high point. The lowest temperature (58 degrees) occurred on August 1 am. 26. On only six days did any precipitation occur. The total rainfall for the month, 2.34 inches, was below normal. September must be noted as having had the second hottest day of the year on the 21st. Its register was 96 degrees. The lowest temperature (40 degrees) came on the 29th day of the month. The rainfall, .33 inches, was the most meagre

of any month of the year. On four days of September precipitation occurred. Thirteen clear days, nine partly cloudy days and eight cloudy days characterized this month of pleasant temperatures.

From September 26 to October 15 there was practically a period of drought. Gentle rains occurred on October 15, and were followed by a 2.26 in. rain on October 16 and slight rains on October 17. There was no rain then until November 2. The total precipitation for October amounted to 2.75 in. hes. On three days of the month appreciable rains had fallen. 84 degrees on October 11 was the maximum temperature of the month, 31 degrees on October 28 the minimum of the month. Columbus Day was a fine, mild day. Hallowe'en was a splendid, cool evening.

Election Day, November 3, was a cool, pleasant day. High winds blew on November 2, 4, 5, 6, 13, 15, 20, 23, 26, and 27. Sixteen clear days came during the month. Heavy rain storms occurred on November 15, 16, and 19. The first cold wave of the year occurred on November 17, when the temperature dropped to 29 degrees. A thin sheet of ice formed on some of the neighboring lakes and on the canal on November 24. Previous to this on November 20 and 21, the first snow flurries of the winter occurred. Thanksgiving Day, November 26, was a fine, mild day. November closed with a heavy drizzle. The month's maximum temperature (76 degrees) was recorded on November 4; the month's minimum (20 degrees) on November 24.

December opened with a foggy day. A series of storms on December 5, 6, 7, and 8 caused the Passaic River to overflow and do considerable damage to local docks, boat houses and factories situated on the meadows and near the water front. On or about December 14 came the first skating of the season at Verona Lake. A few days later Branch Brook and Weequahic Lakes were opened for skat-

ing, and remained so until after the year closed. December 5 was the first day on which it snowed. Only 3.4 inches of snow fell during the month. The total rainfall, however, 5.26 inches, was a trifle above the normal. Lunar halos shone in the heavens on December 20 and 31. Christmas Day was a dark, dull day. The highest temperature +65 degrees, was recorded on December 3, the lowest temperature (3 degrees) on December 27.

Herewith please find appended tabulated weather data

Respectfully submitted,

WILLIAM WIENER,
Meteorologist.

TEMPERATURE COAR. IN FAHRENHEIT DEGREES

MONTH	Mean Tempera- ture (monthly)			Maximum Recorded		Minimum Recorded	
	1843	1892	1914	1892	1914	1892	1914
	to	to		to		to	
	1892	1914		1914		1914	
January	29	29.5	31.8	61	58	10	5
February	31	27.7	27.5	67	56	9	4
March	38	39.1	34.7	85	77	5	12
April	49	52.1	45.7	93	82	22	25
May	59	61.1	60	97	96	34	31
June	69	69.3	69.7	99	95	45	48
July	74	74.1	72.9	102	95	49	50
August	72	72.8	74.5	98	* 98	50	58
September	65	65.8	67.2	98	96	34	40
October	53	54.2	59.3	89	84	27	31
November	43	43.4	44	76	76	15	20
December	33	32.1	31.9	65	65	— 2	3

† Lowest temperature of the year, 5 below, Januar 14

* Highest temperature of the year, 98, August 19.

Annual mean, 1843-1892, 53 degrees

Annual mean, 1892-1914, 51.6 degrees

Annual mean, 1914, 52.8 degrees

PRECIPITATION (IN INCHES).

MONTH	Rain and Melted Snow			Total Snow Unmelted	
	Period 1892-13	Period 1843-92	Year 1914	Period 1892-14	Year 1914
January	3.35	3.65	6.15	10.11	1.6
February	3.66	3.60	3.47	2.94	23.25
March	4.01	3.81	3.27	6.20	10.80
April	3.70	3.53	4.09	6.56	-
May	3.84	3.97	3.13	.....	-
June	3.54	3.57	2.35	.....	-
July	1.10	4.28	7.39	-	-
August	4.88	5.07	2.34	-	-
September	4.82	3.75	.33	-	-
October	4.99	3.58	2.74	2.40	-
November	4.53	3.63	3.44	2.40	-
December	4.77	3.63	5.26	5.97	3.40
Totals	46.15	46.97	43.96	36.58	39.05

Note.—One inch of melted snow averages one-tenth of an inch of rain.

MISCELLANEOUS INCIDENTS OF YEAR 1914

MONTH	Barometer			Wind	Humidity and Sunshine	
	Highest	Lowest	Average	Average Direction	Humidity Average	Per cent. Sunshine
January . .	30.70	29.80	30.25	W.	67.7	47.0
February	30.79	29.55	30.17	N. W.	59.6	73.8
March	30.65	28.82	30.24	S. W.	62.6	70.0
April	30.48	29.80	30.14	S. W.	65.0	60.0
May	30.45	29.65	30.05	S. W.	58.8	78.8
June	30.25	29.65	29.95	S. W.	64.0	79.0
July	30.07	29.64	29.86	S. W.	72.0	60.4
August	30.03	29.80	29.92	S. W.	67.8	61.1
September	30.41	29.79	30.10	N. W.	56.6	75.4
October . .	30.78	29.63	30.12	N. W.	63.9	58.0
November	30.50	29.63	30.12	N. W.	62.0	71.9
December ..	30.53	29.55	30.04	N. W.	66.7	46.0

Annual average barometer, 30.16.

Prevailing direction of the wind, westerly.

Highest barometer recorded for 1914, February 13

Lowest barometer recorded for 1914, Dec. 14, and Feb. 14

CHARACTER OF THE DAYS OF 1914

MONTH	Clear (Cloud- less)	Partly Cloudy (Fair)	Cloudy (Sun less)	Days in which precipita- tion occurred
January	12	1	18	10
February	14	3	11	10
March	15	8	8	9
April	13	6	11	12
May	17	6	8	9
June	12	6	12	13
July	7	5	19	18
August	7	11	13	8
September	13	9	8	3
October	10	16	5	4
November	16	5	9	7
December	10	3	18	11
Totals.	146	79	140	114

EXCESSIVELY HOT OR COLD DAYS

Average number when tempera-
ture fell below freezing,
32 degrees Fahr.

Average number when tempera-
ture rose to 90 degrees
or above.

MONTH	1892 to 1914	1914	MONTH	1892 to 1914	1914
January	24	24	May	1	4
February	23	27	June	3	5
March	16	22	July	6	6
April	3	3	August	3	6
October	1	1	September	1	7
November	9	12	October	1	
December	20	26			
Totals.	97	116	Totals	15	21

U. S. Census Population of 1910.....	347,469
Estimated population, 1914.	395,000
Total area of the City's square miles.....	23 40
Built up square miles	17
Meadow land, square miles.....	6 25
Length of River and Bay Front, miles	11½
Number of miles of granite block	69 9
" " " " asphalt block	1 3
" " " " telford pavement	25 2
" " " " cobble stone pavement	1 4
" " " " asphalt pavement	52 6
" " " " brick pavement	51 6
" " " " bitulthic pavement	33 1
" " " " wood block pavement.....	2 4
" " " " bituminous concrete	0 9
" " " " bituminous macadam	0 125
" " " " medina sandstone pavement	0 2
" " " " Warrenite pavement	0 0 0
Total length of paved streets, miles	17 2
Number of miles of unpaved streets.	6 15
Length of Electric Railways, miles, Essex Div.	1 13 00
Length of Steam Railways, miles	25
Length of brick and concrete sewers, miles	29 1 1
Length of pipe sewers, miles	22 7
Length of private sewers, miles	12 1
Total length of sewers, miles	64 8
Total number of sewer basins	1,065
Length of water mains, miles	128 4
Average daily consumption of water, gallons	45,000,000
Capacity of water supplied per day, gallons.	56,000,000
Number of buildings in Newark.	60,978
Shade trees planted since 1904..	27,842

PUBLIC PARKS

Military, acres	6 45
Washington, acres	1 10
Lincoln, acres	1 37
Other Small Parks, acres..	5 67

NEW PARKS

Branch Brook, acres	280 62
Eastside, acres	12 69
Westside, acres	23 04
Riverbank	5 75
Weequahic, acres	315 08

In concluding my report I wish to express my sincere thanks to the members and employees for their active co-operation and assistance in carrying on the work of the year.

DAVID D. CHANDLER,

Health Officer.

